

# **The Singapore Family Physician**



**The  
College of General  
Practitioners Singapore  
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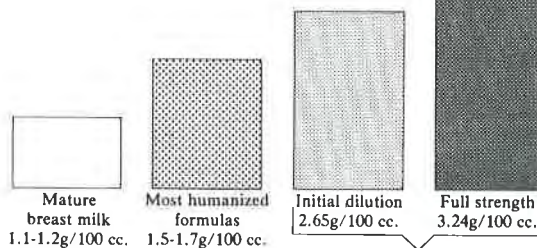


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### References

- 1 *Clin.Med.* **82**, 30, 1975
- 2 1st International Congress of Patient Counselling, Amsterdam, April 21-23 1976
- 3 Proceedings of the Fourth Meeting of the International Society of Hypertension, Sydney, February 1976 *Clin.Sci.Mol.Med.*, **51**, suppl. 3, 5095, 1976
- 4 Letter, *Br.Med.J.*, **iii**, 685, 1974

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## Editorial

### The Private Sector

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Recent comments in the press both from readers and official bodies have been rather critical of medical practice in the private sector. These criticisms range from alleged malpractice by private doctors to the lack of social consciousness of all in the private sector.

Some of these criticisms may well be justified. If there has been medical negligence on the part of some of our doctors, the profession should not proffer excuses to shield them. The public has a right to expect and get a high standard of medical care from no matter whichever sector, private or public.

Some of the other criticisms however seem less valid. There has always been a belief that doctors in the private sector are so much better off financially than their counterparts in government service.

It is true that some of the fees charged in the private sector are unjustifiable but by and large the charges by the average GP can hardly be construed as being unreasonable or exorbitant.

One swallow does not make a summer and certainly not every doctor in the private sector is a millionaire. If you pay a GP the kind of money some of the consultants receive you will soon find a queue at the Ministry door. Quite a number of GPs especially the young ones slogging it out in our new housing estates find the going rough. What then motivates these young doctors to try the unknown and leave the sheltered care of institutional service?

The challenge of the unknown? The lure of lucre? Or the life of a lotus-eater? We do not have all the answers and we think not many do so either. It is certainly about time that someone at least tries to find out what is causing the young and newly graduated doctors to leave government service in droves.

For those who think that our present medical thinking is not to blame these words of Dr. D. Morley, Head of Tropical Child Health Unit London, should set them thinking again. He says of doctors in third world countries, "The doctors

produced are similar to those produced in Europe and America, possibly with one difference, that as medicine and law are so prestigious, the medical school absorbs a high proportion of the best science pupils from the schools. Once qualified, these doctors see a more promising career if they specialise, and the majority spend many years chasing higher qualifications in their own country or overseas ... Not only is the doctor being prepared in the wrong way, but he is imbued with the same expectations in terms of monetary and other rewards as a doctor trained in Europe or North America. Watch the young medical student as he walks proudly with his colleagues towards the front door of the large teaching hospital and discusses the relative merits of the Mercedes or Peugeot owned by the consultants in whose shoes he may hope to step, and whose attitudes he will emulate."

Many erroneously believe that through the private sector lies the short-cut from alpha to omega.

Is the private sector performing a useful role in the community? For one thing it is difficult for this country to do without the private medical sector. Think of all the money that is at present being saved by the Government by **not** providing medical attention to all the patients now seeking treatment from the private sector. Can our country afford to scrap the private sector and institute a national health service for all and sundry in our republic? Even if we could afford it, is it wise or necessary to do so?

Is it too much for a person who is sick and ill to want to be attended to by his own personal doctor, someone whom he has known for quite some time and who he has trust in? Or is it asking too much for a patient who is unwell to be seen in his own home? Obviously not. It would be nice if we could treat every one who is sick this way but one must be realistic not merely idealistic if there is to be efficient functioning of the medical services in the public sector. So those who want that little extra in the form of persona-

lised services must go to the private sector. They cannot and should not expect to be waited hand and foot when they seek treatment at nominal charges in the Government clinics. We do not mean to infer that the standard of medical treatment at Government clinics is any way inferior to that of the private sector but the frills are not there and rightly so.

Having then laid our case for the right of the private sector to exist in our medical set-up we come now to the present sad state of dichotomy in the thinking in our medical services. This dichotomy does our medical services no good and it is time that the chasm be bridged. Most doctors in the private sector will be more than willing to lend a hand in any national medical emergency **provided** there is someone at the helm to co-ordinate and direct their efforts, and it is fitting that those in the Ministry of Health should direct their attention towards this in case of future emergencies.

Whether we receive our remuneration directly from the patients or indirectly through the taxpayers, our doctors are all on the same side of the fence. We are all interested in seeing that the patient gets well and fast. Doctors in Government service must never feel that doctors in private practice are on the other side of the fence, and there should never be the "us and they" relationship between the two sectors.

We all want to see Singapore grow into **the** medical centre in this part of the world. Both the public and private sector have a great deal to

contribute towards this. In this respect it is well to recall the Prime Minister's words when he opened the new wing in Mount Alvernia Hospital on September 21, 1971. He said, "It does not necessarily follow that with the latest equipment, the government hospitals have a monopoly of the best care and attention for patients after operations have been performed ... It is my hope that specialists in private practice will have access to these equipment at a charge which will not be prohibitive ... In the course of the next five to seven years Singapore will become an important medical centre for the region."

Prophetic words these, and it is up to everyone in the medical profession, specialist or generalist, in the private or public sector, to see that we achieve this goal.

If the present public image of the doctor in the private sector is a little tawdry, then it is about time that the profession set this right. Doctors should involve themselves more in community service and be seen in activities that do not involve profit-making. For the general practitioners, both young and old, one of the best is to show more interest in the activities of the College. Nothing can be better than to advance the frontiers of knowledge in the field of family medicine and primary care. This field of medicine has been neglected for far too long.

Let us show that there are still doctors around who do care.

E.K.

(Views expressed in the Editorial are not necessarily the official views of the College).

# The First Sreenivasan Oration The Future Singapore General Practitioner

BY DR. WONG HECK SING MBBS, FRACGP.  
19 November 1978.

I am greatly honoured to deliver the First Sreenivasan Oration.

When Baratham Ramaswamy Sreenivasan was invited to be the first President of the College he said the founding of the College was a great step forward in the medical development of our country. He spoke with the wisdom of one who had devoted over forty years of his life to medicine, fifteen years of which was in hospital practice and the rest in private general practice. He shared the concern that the concentration of medical development in hospital medicine and its specialities with little being done in the field of general practice would not lead to a higher standard of health care for the nation as a whole. He recognised the initiative taken by the founders of the College as the first step that would lead to the establishment and recognition of general practice as a separate discipline. Sreenivasan was a man of many parts — physician, scholar, teacher and administrator, but the role he found most fulfilling was that of a physician. — a family physician. Sreenivasan studied medicine at a time when specialisation in the local teaching hospitals had barely begun. His teachers were generalists. He worked many years in the hospitals at a time when modern therapy was relatively undeveloped.

Management of cases depended as much on patient care as on drug therapy. This gave him a deep insight of human suffering and to the human behaviour. Sreenivasan was a true scholar, for he was one of the few who faithfully pursued continuing education throughout his life. He had often said that the most difficult part in the study of medicine was the study of man himself and he made both the subjects of his life long study. Such were the qualifications of the man who found fulfilment in family practice.

It is seven years since the founding of the Col-

lege but the greater step which Sreenivasan mentioned has yet to materialise into a great leap.

It is still thought today that all who have undergone the basic medical school and hospital training are adequately equipped for general or family practice. This situation might perhaps have been true in Sreenivasan's student days when medical knowledge and its application had not reached the present day level. The medical school was staffed by generalists and students were trained to be generalists. Whole person medicine was taught with emphasis on bedside or clinical skills. Such ancillary aids to diagnosis that were available were few and could be done by the doctor himself. Successful management of the patient depended to a large extent on gaining his confidence. The art and skill of building up patient confidence through good doctor patient relationship was part of the teaching process which continued throughout the student days. It was undoubtedly a slow process — there were no miracle drugs or modern therapy to inspire quick returns. The teaching of medicine included imparting much of the attitudes and skills that were eminently suited for general or family practice.

Even during my student days the teachers were still relatively generalists. The Professor of Medicine was a general physician who taught internal medicine in toto, from neurology to nephrology, from dermatology to gastro-enterology. The Professor of Surgery was a general surgeon who operated from head to foot. The surgeon who removed the appendix also did ENT surgery. The surgeon who plated fractured bones one day repaired harelips the next. Teaching of medicine was less fragmented as compared to the present time.

The situation has changed with the development of the newer specialities in hospital medi-



cine today. Specialists have replaced generalists in patient care and medical teaching. With improved diagnostic and therapeutic means, turnover of patients is accelerated and there is little opportunity to develop rapport with patients. Hospital care is disease orientated with little of the holistic approach. It is episodic in character and impersonal in nature. Contrast this with general or family practice where the care has to be personal and directed to the whole person and it has to be on a continuing basis.

While there has been tremendous development in hospital practice with an increasing number of specialists being trained for hospital secondary and tertiary care delivery, little has been done along the same lines for primary health care. General practice remains an unrecognised discipline and no further training is required for the practitioner apart from having a registrable medical degree. The result is a primary health care delivery that varies widely in its philosophy, in its standards and in its range. Many enter general practice by default rather than by choice. Medical students today are orientated early towards specialist hospital practice. In applying for the medical course a student fresh from school reads in the University's Faculty of Medicine Handbook which says "opportunities exist for the **better** graduates both in the government and the University for extended training in various specialities under a trainee-ship scheme. Such training is usually in preparation for obtaining specialist qualifications". General practice is not included in the scheme of extended training. The idea of specialising that is early implanted is reinforced as the student proceeds to his clinics where his exposure to specialists and to specialised medicine becomes almost total. It is no wonder that postings to a primary care area like the government outpatient dispensary or the accident and emergency unit are so greatly resisted by the graduate.

Can the neglect of general practice go on without serious repercussions? In the USA for instance the emphasis on specialisation with its growing number of specialists has led to the decline in the standard of general practice. The decline is due to fewer and fewer graduates venturing into a territory that is uncharted, untaught and unsung in the academic world. Those that do go into general practice have to learn by trial and error. The process is made much more difficult owing to the changing needs of the society and can be a painful experience for the patient as well as for the doctor. Since general practitioners provide the broadest spectrum of medical service

to the greatest number of patients, the decline in their numbers and the lack of trained new doctors has had a disastrous effect on the health care delivery. It has led to a situation where some of the public has had to turn to specialists for their primary medical care needs. The results have often been unsatisfactory. Costs have been high, the care often discontinuous and fragmented according to the symptoms of the patient.

We see certain similarities in the Singapore situation. Specialisation is gathering momentum. At the recent medical convocation in October there were 111 new graduates and 51 post-graduates with specialist qualifications. Specialisation in hospital medicine only will not improve the quality of primary health care delivery. The entry of specialists into private practice will not materially alter the situation.

We should not have to wait till a crisis develops before taking steps to improve primary care delivery. There are sufficient indications that the time is now opportune, in fact overdue, for the setting up of a structured vocational training for the future general practitioner. Firstly costs in hospital development and its maintenance are so prohibitive that measures have to be taken to cut down the need for secondary care.

The answer to this is in preventive medicine and no one in the medical profession is as well placed as the general practitioner to do the job provided he is well trained. Secondly the changing society of Singapore has highlighted the importance of the environment and the behavioural patterns in relation to ill-health. More and more of the cases seen in consultation in general practice do have a pathological basis but arise from causes in the environment and from interactions in human behaviour. Vocational training in the behavioural sciences and the study of the society in relation to medicine will provide what is deficient in the training of the present graduate. Thirdly there is a growing realisation that in the development of a comprehensive health service a hiatus exists at the primary care level. Quality secondary care delivery cannot be maintained if it is inundated as a result of poor primary care. The government primary health care service is now being reorganised in recognition of this omission. Fourthly with the narrowing of the doctor shortage in sight, as a result of mandatory government service for all graduates, it will soon be possible to give all new doctors a broader training for vocational development.

Reinforcing all this is the call by the College for vocational training. Who else are better qualified than the general practitioners to know what

is necessary and needed in their field of practice?

Why is the present training of new general practitioners in Singapore inadequate? The basis of sound general practice lies in a good foundation of clinical medicine. The non specification of what further post-registration clinical training is required has resulted in many doctors entering general practice with gaps in this foundation. Moreover medical education today is essentially a study of the human **body** per se — its anatomy its physiology and its chemistry followed by its disease processes or pathology. This preoccupation with the physical body results in a hospital practice which concentrates mainly on its diseased parts. Therein lies the major difference from general or family practice. The general practitioner or family physician looks after the human **person**, whose illness is not only confined to the physical part of his body but extends to his being as a whole whether behaviourally or as a unit of society. Because of this difference of philosophy in approach general practice requires skills and attitudes which are not taught or emphasised in contemporary medical education. As a result the philosophy of hospital practice persists when the new doctor enters private practice. His care is essentially remedial in function, disease orientated and is on an episodic crisis-to-crisis basis. This has given rise to the present misconception that general practice is a low level hospital type of practice for which training is amply provided.

To train the future general practitioner it is necessary to define his job. He is the doctor who is able to provide personal primary and continuing health care on a whole person basis to individuals in the context of their environment which includes the family and the community. The care is comprehensive regardless of age, sex or type of health problem, be it biological, behavioural or social, and includes mobilising the services of his professional colleagues and other resources of the community. To get better job satisfaction the general practitioner seeks to extend his care to the entire family where he is able to bring to bear his acquired attitudes, skills and knowledge to the best advantage of each individual member. The future general practitioner is therefore a family physician to many and his roles are preventive, curative, educational, rehabilitative and supportive.

It is impossible to provide a comprehensive training for so wide a discipline within a reasonable time frame. In no other field of practice is it more necessary for the practitioner to continue his learning process throughout his professional career. The vocational training provides the basic

tools with which the general practitioner can practise his discipline and help him to avoid the early pitfalls which the untrained practitioner experiences.

The training of the future general practitioner or family physician should really begin at the time when he is in school. He needs a broad education and should not concentrate mainly on the physical and biological sciences to the exclusion of the humanities and the arts. His understanding of people may be drawn from the reading of novels, biographies, poetry and plays and from the visual arts and this understanding will heighten his sensitivity to the feelings of his fellow men in later life.

In the medical school he should be exposed early in his training to the health needs of the community. The present system of confining one to the laboratories in the preclinical years, followed by further confinement within the walls of the hospitals defeats the main purpose of medical training — i.e. for a product which will cater to the basic medical needs of the community.

The student should be taught not only by specialists but by generalists as well in order for him to maintain a proper perspective to medicine as a whole. I will not dwell further on the early training.

The vocational training of the future general practitioner must be directed towards acquiring the knowledge, skills and attitudes required to meet his job definition. The training should include certain disciplines which are commonly taught in hospital practice and cover areas to which he is unlikely to have been exposed during student or post-graduate days. It must bear relevance to the health needs of the community.

The vocational training has to begin with the study of the art of consultation, the point when patient and doctor meet. It is vitally important that the trainee masters this art which includes establishing rapport, effective communication, gathering necessary information rapidly and organising it logically, identifying the patient's problems and needs, and managing them appropriately. Unlike hospital practice where time and costs are less restricting the general practitioner has to work within these constraints to the patient's best advantage. Another skill necessary in the consultation is the doctor's ability to motivate patient compliance. Unlike hospital practice where the patient is captive, the private patient at large poses this continuing challenge.

The content of vocational training centres around three main areas:—

- (1) The study of the core clinical knowledge comprising of (a) health and diseases (b) the human development and (c) the human behaviour. These form the clinical foundation of general practice.
- (2) The study of society in relation to health and illness.
- (3) The study of the organisation and management of the practice.

In the study of the first area we have to begin by learning the norms — in health, in human development and in human behaviour. In hospital practice the student or the doctor is so pre-occupied with the pathological that this study is often overlooked. It is only in general practice that one constantly poses the question — "is this normal?"

There are two ways of studying the disease content — by the medical disciplines relevant to general practice or by the prevalent problems presented to general practitioners. Studies of the latter have been done in some of the western countries and they reflect more accurately the health needs of the community at the primary care level. Apart from morbidity returns by the government outpatient dispensaries we have no such information locally. In Singapore the study of diseases may be done through hospital training in the relevant disciplines. Extended training is required in internal medicine, pediatrics, geriatrics, psychiatry and emergency medicine. In addition one should be competent in office procedures in obstetrics, gynaecology, general surgery, orthopaedics and laboratory medicine. Further there should be short attachments in ophthalmology, ENT diseases, dermatology, venereology and occupational medicine.

The learning of human development covers the whole life span from conception till death, enables the general practitioner to help the individual under his care to attain optimum development as a person. The understanding of human development will help in better patient assessment and management.

Of the 3 components of clinical medicine human behaviour is perhaps the area where the new general practitioner is least knowledgeable. It is commonly believed that its study is part of the training for the psychiatrist but this belief is soon dispelled as the general practitioner enters practice. So much of health or ill health is related to the behavioural patterns of the individual. The understanding of the behaviour in interpersonal relations and in family relationships leads to a greater understanding of the individual. The first

step to patient care is to understand the patient. The teaching of the behavioural sciences will have to involve many people including psychologists, psychiatrists, anthropologists, sociologists, ethicists and philosophers.

So much for the core clinical knowledge — the first area of study.

The second area of study is directed to man as a biological unit of his society and how his environment influences his well being. In hospital practice the doctor sees his patient who is dislocated from his normal environment. In general practice the patient is much closer to his own world and the general practitioner has to face the realities of the society in managing his patient. The study of society includes the study of its cultures, its religions, its economics, its laws, its social values, its resources, its social stratification and its physical environment. Included in this area of study is the study of epidemiology, the basic science of preventive medicine.

The third area of study is the practice. It includes the organisation, the premises, equipment, the legal responsibilities and especially the medical recording. In Singapore all general practices are expected to provide dispensing facilities and the general practitioner has to learn how to run a dispensary.

The training of the future practitioner must be centred in a general practice situation with hospital attachments for the relevant clinical disciplines. The teachers should include not only members of the profession but will involve people outside the profession. Throughout the training the humanistic aspects of medicine are stressed. This coupled with the scientific aspects will help the future practitioner not only to identify the disease processes but also the personal needs and expectations of the individual.

I have outlined the training of the future general practitioner. I have compared the different disciplines and philosophies of hospital practice and general practice. I should mention that all medical practice was at one time general practice. The evolution of the specialist disciplines is a reflection of the advancement in medical science but there should not have been any change in the physiology of practice. The study of general practice or family medicine is valuable to all medical students regardless of their intended discipline since humanism, compassion and concern for the patient should be basic to all care. The field of practice which involves more than half of all the total doctor population cannot be ignored academically. It is the profession's bounden duty to see that the quality of health



care is constantly upgraded and maintained at **all** levels of delivery. It is ironical, even unhealthy that the most broad and very demanding field of medical practice remains the least developed and untaught.

Sir Denis Hill writing in "Psychiatry in Medicine, Retrospect and Prospect" stated "The family physician's role is a difficult one. If it is to be sustained and developed, the general practitioner must become the most educated — the most comprehensively educated of all the doctors in the health service". Such a general practitioner

was B.R. Sreenivasan, for

few were so comprehensively educated, few had such an interest in the broad spectrum of clinical medicine,

few had such an enthusiasm for continuing education,

few had such a sincere interest in people, and few derived such personal satisfaction from intimate relationship with patients developed over long periods of continuous care.

It is fitting we name the College Oration after this great family physician.

# Menstrual Disorders

Clinical Prof. Y. M. Salmon, FRCOG'.  
Senior Obstetrician & Gynaecologist, 'B' Unit.  
Kandang Kerbau Hospital

Normal physiology of Menstruation. Menstrual period 4 days. No clots. Loss 50 ml.

28

Menstrual disorders can be considered in the three steps of a Woman's Life, ie. puberty, sexual maturity, and the peri- and post-menopause.

## Terminology:

Menorrhagia (hypermenorrhoea) — excessive, cyclical periods

Epimenorrhoea (polymenorrhoea) — too frequent cyclical periods

Metrorrhagia (Metrostaxis) — acyclical, irregular or continuous bleeding

Hypomenorrhoea — scanty, cyclical periods

Oligomenorrhoea — infrequent periods

Amenorrhoea — lack of periods

As a guide, **menorrhagia** results from disorders of the uterus and its vascular apparatus. **Epimenorrhoea** is caused by disease or functional disorder of the ovary. **Metrorrhagia** is often caused by a "surface" lesion of the genital tract, including abnormal pregnancy states; sometimes it is related to a marked disturbance of the ovarian cycle.

## ABNORMAL UTERINE BLEEDING

1. **General causes** — Acute febrile condition, chronic venous congestion; anaemia; idiopathic thrombocytopenic purpura.

2. **Psychological** — acting via endocrine or autonomic nervous system.

3. **Endocrine** — eg. hyperoestrogenism

a) Hypothalamus/Pituitary — disease or tumours stimulating production of Hypothalamic Releasing Factors and/or Gonadotrophins.

b) Thyroid — hypothyroidism

c) Liver — Cirrhosis of liver prevents inactivation of oestrogens

d) Exogenous oestrogens, eg. for climacteric symptoms; or irregular use of oral 'pills'.

## 4. Genital lesions

a) Ovaries — pelvic inflammatory disease, endometriosis, large ovarian tumours, oestrogen-producing tumours, cystic ovaries

b) Uterus — disturbed pregnancy state, pelvic inflammatory disease, adenomyosis, fibromyomata, intra-uterine contraceptive device, tuberculous endometritis, post-salpingectomy, polypi, cervical erosions, dysfunctional uterine bleeding, malignancy.

c) Vagina/Vulva — trauma, pessaries, decubital ulceration, infections, benign and malignant growths.

## Dysfunctional Uterine Bleeding

In dysfunctional uterine bleeding, the basic defect lies in **ovarian** secretion of oestrogen and progesterone, which may be decreased or increased, or not secreted cyclically. The result may be scanty and/or heavy periods, or acyclical periods. Sometimes, the disorder may be secondary to **hypothalamic/pituitary** dysfunction.

Thus, in **puberty**, the blame lies in the pituitary, while **premenopausally**, it is ovarian unresponsiveness. During **sexual maturity**, corpus luteal formation is often faulty; after childbirth, pituitary function takes some time to return to normal. In the "pelvic sympathetic syndrome", emotional stress or chronic pelvic inflammatory disease can cause pelvic congestion.

Types	Disorder	Symptoms	Endometrium
1 Ovulatory	a) Short proliferative phase b) Long proliferative phase	Polymenorrhoea Oligomenorrhoea	Normal Normal
2 Corpus Luteum Abnormality	a) Insufficiency b) Prolonged	Premenstrual spotting Menorrhagia Polymenorrhoea Oligomenorrhoea Menorrhagia	"Irregular ripening of endometrium" — patchy progestational changes "Irregular shedding of endometrium — patchy progestational changes on the 5th day of menstrual period.
3 Anovulatory	a) Cyclical b) Acyclical	Oligomenorrhoea Menorrhagia Metrorrhagia	Proliferative Hyperplastic

There are 3 types of anovulatory acyclical bleeding.

- (i) Oestrogen secretion rises to a high level and depresses Follicular Stimulating Hormone output with endometrial breakdown.
- (ii) Oestrogen secretion is prolonged and unopposed with no negative feedback to pituitary. Hyperplastic endometrium collapses. This is classical Metropathia haemorrhagia.
- (iii) Oestrogen secretion "teeters" around a critical threshold bleeding level, resulting in irregular "threshold bleeding".

#### Diagnosis of Menstrual Disorders

- 1) **History** — detailed menstrual history, dates and amount lost, and associated symptoms, eg dysmenorrhoea, emotional stress; other complaints.
- 2) **Examination** — general condition, exclude other sources of bleeding eg. from bladder or rectum. Exclude endocrine or systemic disease. Speculum and pelvic examination. Rectal examination in young girls.
- 3) **Special Investigations**
  - (i) Haematological
  - (ii) Vaginal smears for oestrogen status (serially)
  - (iii) Cervical smears, uterine aspirate for cancer screening.
  - (iv) Cervical mucous 'fern' test
  - (v) Basal temperature charts
  - (vi) Dilatation & Curettage (and Biopsy of the Cervix where indicated)
    - to exclude lesion in uterine body and cervix

— to determine endometrial functional state

Remember, D&C is mandatory in peri/post menopausal bleeding; may be deferred for a short period (3 months) in other cases in the absence of clinical abnormality. The more irregular the bleeding, the greater the need for D&C. Performed in second half of cycle, or during heavy or irregular bleeding.

- (vii) Hormone assays difficult and expensive
- (viii) Other endocrine investigations — thyroid, adrenal, pituitary.
- (ix) Laparoscopy
- (x) Hysterosalpingography

**Management** — (For easy reference consider under groupings of three)

- 1) Determine cause. Take care to exclude organic disease.
- 2) If dysfunctional uterine bleeding, determine underlying cause of defect.
- 3) Individualize treatment according to —
  - a) age, parity and wishes of patient
  - b) nature of organic disease or dysfunctional uterine bleeding
  - c) severity of bleeding and general condition of patient

#### General Measures

- 1) Rest in Bed.
- 2) Reassurance and removal of mental stress.
- 3) Record of menstrual periods.

#### Definitive Treatment

Three main aspects —

- 1) **D&C** — Other minor procedures at the time,



eg. avulsion of polyp, biopsy and electrocauterisation of the cervix.

2) **Drugs** in uterine dysfunctional bleeding:

(i) **Hormones**

— **Oestrogen** are not in use alone

— **Progestogens**

a) to arrest haemorrhage: By injection, eg. I/M Progesterone 100 mgm, or by tablets, eg. Norethisterone 20-30 mgm per day for 3-4 days. Then observe, or cyclical treatment for 3 months.

b) cyclical treatment — **full cycle** Norethisterone 10-20 mgm daily from 5th to 25th day of cycle for 3 courses. May use oral contraceptive pill instead.

In second half of cycle — Norethisterone (or oral contraceptive) 10-20 mgm from 15th to 25th days is given for premenstrual spotting.

— **Androgens** — not used much for fear of virilisation.

(ii) **Antifibrinolytics** — Epsilon — aminocaproic acid (EACA) or tranexamic acid (AMCA) cause a reduction in fibrinolysis in the uterus? Risk of thromboembolism. AMCA (Cyclokapron) 1 gm q.d.s. for first 4 days of period.

(iii) **Clomiphene & Human Pituitary Gonadotrophins** to induce ovulation in dysfunctional uterine bleeding.

3) **Surgery**

(1) D&C sometimes therapeutic.

(2) Specific surgical procedures, eg. myomectomy, removal of ovarian tumours. Malignant disease of the genital tract is treated individually by surgery, and/or radiotherapy or chemotherapy.

(3) Hysterectomy (with or without Bilateral Salpingoophorectomy) is indicated in women over 40 years in cases of persistent or recurrent dysfunctional uterine bleeding, fibromyomata, endometriosis, pelvic inflammatory disease.

In conclusion, remember to find the cause for any menstrual disorder and then treat. The pendulum of treatment swings from conservative in the young to radical in the older patient.

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# Chronic Pelvic Pain

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Chronic pelvic pain is one of the commonest symptoms which bring women to seek medical advice. Apart from gynaecological causes, orthopaedic conditions and psychogenic causes contribute to this condition. An understanding of the pain pathways is an essential step in the diagnosis of the cause of chronic pelvic pain. The topic will be discussed under the following headings:—

- I Pain Pathways and the Pathophysiology of Pelvic Pain
- II Aetiology of Chronic Pelvic Pain
- III Diagnosis and Clinical Situations
- IV Investigations and Treatment

## **I — Anatomical Considerations, Pain Pathways and Pathophysiology**

Pain is a disagreeable sensation and serves as a protective or warning mechanism for the body. The withdrawal reflex resulting from painful stimuli prevents more serious or widespread injury. It also enforces rest, as an injured painful part of the body becomes more painful if moved. Thus, perpetuation of the injury is prevented, and healing promoted. There are, however, some clinical situations where pain has no apparent useful function. The gnawing pain of advanced cancer is one such situation. Another example is labour pain.

Pain impulses are received by naked nerve terminals in the skin, subcutaneous tissues, muscles, subperitoneal tissues, periosteum and viscera. They then travel via the medullated (myelinated A-delta fibres) or the finer unmyelinated (type C) fibres either directly in the cerebrospinal nerves or by sympathetic trunks and white rami communicantes to the posterior root ganglia and enter the spinal cord. In the cord, the fibres ascend 1 — 6 segments in the dorsolateral Lissauer's tract and end on second order neurones which begin in the posterior grey horn and cross over to the contralateral

side before ascending in the lateral spinothalamic tract to end in the thalamus. Third order neurones in the thalamus transmit impulses to the cerebral cortex via the thalamo-cortical radiations, principally in the post central area. The cortical areas are concerned with the discriminative, exact and meaningful interpretation of pain, but perception alone does not require the cortex.

Clinical and experimental data over the years suggest that pain is integrated at 3 levels of the C.N.S.: the tectum mesencephalon, the thalamus, and the cerebral cortex. The lowest level of integration is the tectum mesencephalon which in the phylogenetically primitive life served as the only centre for pain perception. Although in Man the function of pain perception has been taken over to a large extent by the thalamus and cortex, the tectum mesencephalon may in some instances serve as an appreciation centre of low order for pain.

Pain is not always perceived directly over the affected visceral organ. It is often 'referred' to some somatic structure which may be some distance away, and often unrelated to the primary site. This is known as "referred pain" and is of some significance when one is discussing pelvic pain. Pain from Pelvic pathology can often be referred to the back or the inner aspect of the thighs.

## **Pelvic Innervation**

Both somatic and visceral nerves innervate the pelvic organs.

**Somatic Supply** — Afferent (sensory) nerves are incorporated in the somatic nerves supplying the pelvis. The main somatic supply is via the internal pudendal nerve (S 2, 3, 4) sensory fibres of which supply the skin of the vulva and clitoris and vagina. In addition, the ilioinguinal nerve and the genital branch of the genitofemoral nerve (L 1, 2) supply the mons and forepart

of the vulva, and the perineal branch of the posterior cutaneous nerve of the thigh (S 1, 2, 3) supplies the perineum.

### Visceral Innervation

The sensory innervation is mainly sympathetic (T11, 12, L1) but parasympathetic nerves are also present (S2, 3, 4). Briefly, sympathetic nerves from the sympathetic chain on either side intermingle and form a plexus at the bifurcation of the aorta. This is called the superior hypogastric plexus. This subdivides inferiorly into the inferior hypogastric plexus which lie on either side of the ampulla of the rectum, the forward extensions of which are the Lee

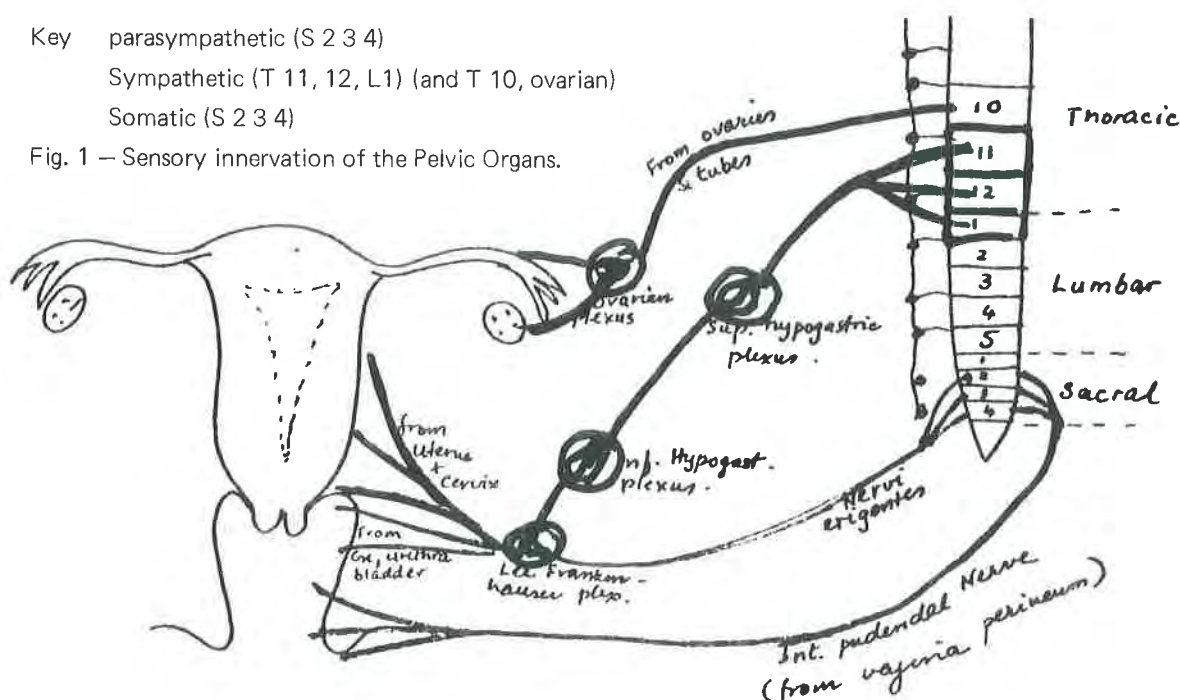
Frankenhauser Plexus situated in the parametria. Sensory fibres from the pelvic viscera pass into this plexus which is sited in a square bound medially by the rectum, supravaginal cervix and the lateral fornix, laterally by the uterine artery and the cardinal ligament. This plexus also receives parasympathetic fibres from the nervi erigentes.

The ovaries and the fallopian tubes are distinct from the other pelvic viscera in that their sensations are carried via nerves of the ovarian plexus in the infundibulopelvic ligament to the tenth thoracic segment.

A summary of the pelvic innervation is shown in Fig. 1.

- Key    parasympathetic (S 2 3 4)  
          Sympathetic (T 11, 12, L1) (and T 10, ovarian)  
          Somatic (S 2 3 4)

Fig. 1 — Sensory innervation of the Pelvic Organs.



### Clinical aspects of pain originating from pelvic viscera

As has been mentioned earlier, pain from the pelvic organs may be felt in the organ itself (though poorly localised) or be referred to associated somatic structures.

**The Uterus** — Pain due to uterine cramps or contractions may be felt in the uterus itself or if severe, may be referred to the front of the abdominal wall below the level of the ant. sup. iliac spine, the groin, the upper and inner parts of the thighs up to the knee, and behind to the upper part of the sacrum, buttocks and iliac crests.

**The Cervix** — The pain may be felt locally in the cervix itself, or it may be referred to the lower part of the sacrum, in the hypogastrium or in the right and left iliac fossae.

**The Fallopian tube** — The tube is extremely sensitive and the pain is felt in the tube itself or referred to the loin and the abdominal wall around the umbilicus.

**The Ovary** — The ovary is relatively insensitive and Theobald believes that the so-called ovarian pain arises usually in the cellular tissue of the broad ligament which is richly supplied with nerves. Referred pain is to the lower abdomen and groin. It has long been taught that there



is a tender point (the ovarian point) on deep pressure in ovarian disease 3 in. in a vertical line above the pubic spine, but whether this is true, and if it is, whether it is a referred hyperalgesia or tenderness of the ovary itself are points for further investigations.

**The Bladder** — This organ has a double supply. Pain from fundus of the bladder (T12, L1) is referred to the hypogastrium. That from the trigone and urethra (S2, 3, 4) is referred to the lower sacral area of the back, buttocks and perineum, and down the back of the thighs and legs to the heels.

**The Rectum** — Pain can be felt in the rectum itself or it is referred to the lower sacrum, the back of the thighs and legs to the heels.

## II Aetiology of Chronic Pelvic Pain

Chronic pelvic pain can arise from a number of gynaecological illnesses. In addition, orthopaedic conditions and diseases of the lower bowel and bladder may present with longstanding pelvic pain. Psychogenic causes may be important and there may be a strong functional overlay. A convenient classification of the causes of pelvic pain is as follows.

### A. GYNAECOLOGICAL CAUSES

1. Inflammatory — Chronic P.I.D.  
Chronic Cervicitis
2. Endometriosis and Adenomyosis
3. Tumours — Uterine fibroids  
Ovarian cysts  
Secondaries to the spine, sacral plexus
4. Uterine Retroversion — with or without prolapsed ovaries in P.O.D.
5. U/V prolapse
6. Primary dysmenorrhoea
7. Pelvic congestion or "sympathetic" syndrome
8. Post operative pelvic adhesions
9. Psychogenic causes — e.g. sexual frustration

### B. ORTHOPAEDIC CAUSES

1. Sacro-iliac strain
2. Osteoarthritis
3. Osteoporosis
4. Spondylolisthesis

### C. GENITOURINARY AND G.I.T. CAUSES

1. Urinary Tract Infection
2. Chronic Constipation
3. Diverticulitis
4. Chronic appendicitis

### D. PSYCHOLOGICAL CAUSES

1. Hysteria
2. Anxiety neurosis

The list serves to show that a careful evaluation of the patient's symptoms is necessary before an accurate diagnosis can be made. In the present discussion, emphasis will be placed only on the gynaecological causes of pelvic pain.

## III Diagnosis and Clinical Situations

It is absolutely essential to obtain a complete history to obtain a clue as to why the patient is suffering the pain. The nature of the pain, its site, severity, onset, frequency, duration, aggravating and relieving factors should all be enquired into. In addition, its relation to menses, coitus, micturition, defaecation and posture should be elicited. A full social and family history, with special relation to social problems, past psychiatric illness should be recorded.

A full and pelvic examination should follow the history taking. In many instances, a rough idea of the cause can be obtained from the history and examination.

The following conditions will be considered next because they bear direct relationship to the diagnosis of pelvic pain.

### 1. Pains related to menstruation

- a) Physiological — Ovulation pain
  - Pre-menstrual tension
  - Primary dysmenorrhoea
  - Pelvic sympathetic syndrome
- b) Pathological — P.I.D.
  - Endometriosis
  - Adenomyosis
  - Fibroids

### 2. Pains related to coitus (dyspareunia)

- Superficial — primary  
secondary
- Deep — primary  
secondary

### 3. Chronic backache

- Postural backache
- due to gynaecological disease (retroversion, U/V prolapse)

### 4. Pain due to Malignant disease

## **A. Pains Related to Menstruation**

### **Physiological**

#### **1. Ovulation Pains**

Many women experience some discomfort in the hypogastrium or in one or the other iliac fossa for 12 – 24 hours just before or just after ovulation. This is the *mittelschmerz* (German-mittel-middle; schmerz-pain) which may be associated with some spotting per vagina or passage of mucus (ovulation cascade) although either may occur independently. The diagnosis is suggested by the association with the menstrual cycle – viz 2 weeks before next expected menses. No active management is required.

#### **2. Premenstrual Tension**

Most well adjusted women experience minor psychological and somatic changes for a few days preceeding menstruation. The symptoms occur from about 7 – 10 days before the menses and general symptoms like malaise, restlessness predominate. Pain itself is uncommon, but in the severe types, congestive dysmenorrhoea occurs. Treatment is mainly symptomatic and only in the more resistant cases should diuretics or hormones be prescribed.

#### **3. Primary Dysmenorrhoea**

Otherwise described as spasmodic, true intrinsic, essential or functional, it is believed to be an upset in the autonomic system. 20% of women experience pain relation to menstruation but not more than 22% of women are incapacitated by it. It is a colicky sensation felt in hypogastrium and often referred down the medial and anterior aspect of the thighs. It begins 1 – 2 hours before onset of menstruation and is over by 24 hours. The aetiology of primary dysmenorrhoea is yet to be determined. Primary dysmenorrhoea is further aggravated by environmental tension e.g. domestic or at school. Most cases will respond to reassurance and mild analgesics. Severe cases may require further treatment, the first choice being of ovulation and the second manual dilatation of the cervix.

#### **4. Pelvic Sympathetic Syndrome**

Theobald's conception of the pelvic sympathetic syndrome may be the cause of pain in the pelvis. Theobald believed that the pain is due to functional changes in the sympathetic nerve endings in the uterus or parametric connective tissue, lowering their pain threshold. The lowering of the threshold may take place anywhere in the afferent arc or in the receptor cells of the brain, and the cause may be anything which lowers general resistance, including

mental stress, inflammatory processes, trauma etc. The threshold may be restored to normal by psychotherapy or local treatment.

Duncan and Taylor described a similar syndrome which they ascribed to pelvic congestion due to emotional disturbances. They have demonstrated experimentally an increase in the blood flow in the vaginal walls during emotional crises, especially resentment, and consider that such temporary increase in the vascularity of the pelvic might, if often repeated, lead to chronic congestion and oedema.

The pain caused by this 'syndrome' is in the lower abdomen and may radiate to the thighs. It is often increased in the premenstrual phase and may be associated with other menstrual disorders. The patients are often frigid and have unhappy marital lives.

### **Pathological**

#### **1. Pelvic inflammatory disease**

The chronic form of this disease gives rise to congestive dysmenorrhoea and deep seated dyspareunia. A periodic exacerbation of a constant discomfort occurs. The pain is at its height before menses and gradually settles as congestion diminishes. There will be associated features of the disease – e.g. vaginal discharge, cervical tenderness, mild pyrexia and sometimes tubo-ovarian masses – which should make diagnosis of P.I.D. possible.

#### **2. Endometriosis**

Secondary dysmenorrhoea after the age of 30 is the classical symptom of endometriosis. Pelvic deposits of endometriosis cause an ache that is deep seated in the lower abdomen, pelvis, rectum and lower back – the pain begins 2 – 3 days premenstrually but reaches its climax during or at the end of the menstrual flow and persists for several days. The diagnosis may be made from the history alone. The deposits may be anywhere in the body but usually below the umbilicus. The ovary is the commonest site of the involvement, and the recto uterine pouch the second most common site of involvement. Vaginal examination may reveal the presence of endometriotic cysts or there may be tender nodular thickenings of the uterosacral ligaments. The need for treatment depends on the severity and type of symptoms. Observation, in absence of significant symptoms coupled with analgesics and reassurance will suffice for many patients. In presence of disturbing symptoms the disease may be arrested, and occasionally eradicated by suppression of ovulation and menstruation

by pregnancy, or artificially with hormones.

### 3. Adenomyosis

Intramenstrual pain is sometimes seen with adenomyosis although pain is not invariable. When present it is often severe, described as grinding or knife like. The pain is probably due to intramural haemorrhages. The uterus may be enlarged symmetrically or assymetrically and is tender to palpation.

### 4. Uterine fibroids

Uterine fibroids occasionally may be associated with dysmenorrhoea — either of the congestive pattern or occasionally when a submucous fibroid is present there may be spasmodic dysmenorrhoea.

### B. Pains related to coitus

Dyspareunia has been variously classified by different authors. Harlow has provided a working classification of dyspareunia as follows:—

1. Superficial — occurring during penetration
  - Primary — manifest immediately after marriage
    - 1) vaginismus a) faulty sex education due to education b) ignorance c) clumsy partner d) sexual assault in the past
    - 2) tough hymen
    - 3) atresia of a) congenital introitus b) acquired
  - Secondary — appearing some years after married life, often after childbirth
    - 1) vaginismus
    - 2) local trauma
    - 3) inflammatory conditions e.g. vulvitis, bartholinitis
    - 4) urethral conditions
    - 5) scarring due to obstetric injuries
    - 6) anal conditions
2. Deep occurring after penetration
  - Primary — i) Vaginal obstructions — e.g. septate vagina ii) pelvic tumour
  - Secondary — i) infection e.g. cervicitis, vaginitis salpingoophoritis ii) endometriosis, particularly if the rectovaginal

- septum and uterosacrals are involved
- iii) retroverted uterus
- iv) prolapsed ovary
- v) pelvic tumour
- vi) tender bowel — especially constipation

It will be seen that dyspareunia is a symptom and not a disease. Primary dyspareunia is most commonly caused by vaginismus associated with fear, hysteria, and general lack of sex education, often made worse by clumsy attempts at coitus by the husband. There is considerable variation in the reaction to examination in these patients, many of whom are exceptionally modest. In a mild case, a well lubricated finger may be at once gently inserted into the vagina without causing more than a little flinching. In a more severe case the finger produces a violent reaction — when the perineal and vaginal muscles contract as well as the levatores and the adductors of the thigh, examination may prove extremely difficult. The treatment is aimed at sex education of both partners — rarely it may be necessary to dilate the vagina under anaesthesia, a procedure more to gain the woman's confidence than to overcome any mechanical obstruction.

### C. Chronic Backache

#### 1. Postural Backache

Low backache will be considered next as it is an exceedingly common complaint: Postural backache in the human female is due to the 'humanness' of the sufferer and not the femininity — none the less, the symptoms are attributed to the genitalia by the patient and she presents herself to the gynaecologists. Less enlightened gynaecologists have cauterized erosions and ventrofixated retroverted uteri and found to their dismay that their patients still had backache. The modern day gynaecologist should realize that low backache is an orthopaedic problem (the cause of backache lies in the back). An exhaustive anthropological review of the human skeletal system is not in keeping with a discussion of this nature but it will suffice to remember the following: the spinal column in the foetus in utero is curved gently convex backwards. In adult life the primary curve remains only in the thoracic region and in the sacrum. In the neck and the lumbar region the column is convex forwards. The cervical secondary curve comes into being in early infancy when the baby learns to hold his head up and the secondary lumbar curve develops in the toddler when he learns to stand and walk. The two secondary



curves are where there is great mobility and nearly all the problems of the spine occur in these two areas of secondary curve. Posture depends on the degree of rotation of the pelvis upon the heads of the femora and this rotation is expressed by the angle of inclination of the pelvis. The position of the pelvis determines the degree of lumbar lordosis and indirectly the position of the rest of the spine. Postural backaches are related to the general muscular development of the patient and to their bodyweight. The tall thin poorly developed women and the obese will therefore have a tendency to develop backache. During pregnancy a woman may gain 12 kilogram. (28 lb), and half of this is in the abdomen. The weight alone is enough to change body mechanism, and when it is so badly distributed its effect are made worse by the increased lumbar lordosis it causes (Rhodes).

Abuse of the back by poor standing, sitting and sleeping habits, will result in the classical history of the patient who awakes with pain perhaps at 6 a.m. When she gets out of bed and limbers up a little the back improves. Somewhere about midmorning towards the end of her household chores the back worsens again, but on sitting down for a cup of tea it improves. As she continues about her work the pain gets bad again and she is glad to be able to sit down, but if she sits for too long the pain gets worse again. It is a final relief to get to bed to lie down, but with the relaxation of her musculature in sleep she gently strains her ligaments and joints and wakes early the next morning with pain.

The diagnosis is arrived at by the clinical history: examination will show that flexion of the spine in the correct position will reproduce the pain either immediately or within the next day. Radiography are taken to exclude major spine pathology such as spondylolisthesis and ankylosing spondylitis. Treatment involves general education as to posture, exercises of the spinal muscles (particularly swimming) weight reduction in the obese, and advice on how not to abuse the spine in carrying and lifting weight. A corset often is of great relief.

## 2. Gynaecological Causes — Prolapse and Retroversion

Vaginal prolapse never causes backache; uterine prolapse and retroversion may on rare occasions do so by dragging on the uterosacral and cardinal ligaments. Backache caused by uterine prolapse is immediately relieved by lying down, a crucial point in diagnosis. Before definitive surgery is undertaken to cure backache due

to retroversion or 1° U/V descent, it would be helpful to correct the defect with a pessary and observe if the pain disappears. If it does not, some other cause for the backache must be sought.

### Chronic cervicitis

This is a debatable cause, and probably causes backache only if severe and associated with chronic cellulitis in the adjacent ligaments. A simple cervical erosion **never** causes backache.

### D. Pain due to Malignant Disease

Pain is not an early symptom of carcinoma of the body of the uterus, but when it appears it is persistent and progressive, spreading from lumbar region around the lower abdomen and radiating the hips and thighs. Advanced cases of sarcoma of the uterus are also accompanied by severe pain. Carcinoma of the cervix in its late stages is invariably accompanied by pain which is progressive. At the beginning it is a mild poorly localised diffuse pain in the pelvis and low back. Later as the cervix and adjacent fascial structures supplied by somatic spinal nerves become invaded by the tumour, the pain gradually extends to the lumbar region, to the hip and posterior aspect of the thigh, stopping at the level of the knee. Later it extends to the ankle and toes. In general the intensity and spread of the pain varies directly with the growth of the tumour and involvement of the pelvic structures. The pain is usually more intense and extensive on one side than the other, depending on the extension of the disease. It is produced by perineural sheath invasion, and pressure on the lumbosacral plexus. Occasionally blockage of the cervical canal produces pain from pyometra. In endometrial carcinoma 15% of patients may experience a mild diffuse ache in the hypogastrium or iliac fossa. The pain characteristically occurs at the same time each day (Simpson's pains). Suprapubic pain is symptomatic of invasion of the anterior vaginal wall or bladder, while pain in the dorsolumbar region is indicative of ureteral compression with subsequent hydro ureter and hydronephrosis. In advanced cases where there is a rectovaginal fistula, there may be severe sacro coccygeal and perineal pain. Pain may also be present in bones and other sites of metastasis of malignant neoplasia of any origin.

### IV Investigations & Treatment

The laboratory investigations will be directed by the disease clinically suspected. For example, X-rays of the spine may be called for in

spinal conditions and examination of vaginal discharge in P.I.D.; urinalysis and culture may be necessary if chronic U.T.I. is suspected. The list is inexhaustible.

The problem patient will present occasionally in whom one cannot detect any abnormality clinically. In such cases, it would be unwise to label her as "non gynaecologic" or "psychogenic" without visualising her pelvic organs by laparoscopy. Diagnostic laparoscopy in chronic pelvic pain has been a boon to many patients in whom minimal endometriosis, pelvic inflammation or ovarian pathology has been missed clinically. Prompt appropriate treatment has brought relief.

If no gynaecological diagnosis can be made and the problem is one of low backache, the help of an orthopaedic colleague should be sought. Extensive attempts must be made to exclude organic disease attributing the symptom as 'functional'. It must be remembered that the occasional "neurotic" woman may still have an organic lesion.

#### Treatment

The treatment of chronic pelvic pain will logically be aimed at treatment of the cause of pain, and its elimination, if possible. Conservative treatment should be aimed at where possible before resorting to drastic surgical procedures. It also must be borne in mind that no amount of surgery is going to cure the 'neurotic' woman and careful selection of cases is essential before one advises 'symptomatic' surgery (like for example presacral neurectomy).

In some cases, the disease is 'incurable' (e.g. in advanced malignancy), and it behoves us to provide the patient with as much relief as possible. Armed with the knowledge of the physiology of pain transmission, one can systematically approach the problem of pelvic pain. The following avenues of approach are available, none being mutually exclusive:

- i) interruption of neural pathway
- ii) raising pain threshold
- iii) modification of reaction pattern
- iv) abolition of consciousness

One of the most frequently employed method of pain relief is directed towards the interruption of the nerve pathways which carry the impulses to the brain. The interruption may be effected by analgesic block or by neuro surgical procedures where indicated. The site of analgesic block may be local, administered by skin infiltration, or regional — e.g. pudendal nerve block, paracervical block, caudal anaesthesia,

epidural anaesthesia and spinal anaesthesia. Permanent abolition of these nerve pathways is achieved by surgical division — either at the peripheral nerve, or the dorsal nerve root, or the lateral spino thalamic tract or even at the level of the midbrain, thalamus and sensory cortex — (this is obviously the province of the neuro surgeon and no more will be said).

Probably the most commonly used approach to the therapy of pain is directed towards raising the pain threshold, by administering pharmacological agents which specifically depress the brain centres responsible for the reception of noxious stimuli giving rise to the pain. The analgesics are classified according to their relation to opium — viz narcotic analgesics and non narcotic analgesics. The non-narcotic analgesics are generally milder than the narcotic ones. The non-narcotic are chiefly one of 3 groups —

- i) salicylates — aspirin
- ii) aniline derivatives — phenacetin, paracetamol
- iii) pyrazolone derivatives — phenylbutazone
- iv) others — Mefenamic acid (Ponstan)

Although the salicylates are effective analgesics, they have been associated with a disagreeable incidence of gastrointestinal haemorrhage. Phenacetin and paracetamol irritate the intestinal tract to such lesser degree and have become more popular as mild analgesics. Large doses of phenacetin and or paracetamol have been associated with renal damage. Ponstan is an analgesic similar in power to aspirin and can cause brisk diarrhoea.

The narcotic analgesics commonly used are codeine, pethidine and morphine. Morphine is very potent and acts centrally to relieve pain.

Codeine is similar to morphine but has one quarter the analgesic effect. It potentiates the analgesic effect of aspirin.

Pethidine is a more potent analgesic than codeine. Its action is antagonized by nalophine. Intramuscular injection provides analgesic for 3 — 4 hours. It is metabolized by the liver and a little is excreted unchanged in the urine.

Another very important method in the management of pain is aimed at modifying the reaction of the patient to the sensation. This is therapeutically as important as decreasing or eliminating the perception to pain since the response to pain may be as disabling as the perception of pain per se. Essentially the principle of therapy is one of allaying or eliminating the anxiety fear and apprehension which are usually associated with pain. This may be accomplished by pharmacotherapy, psychotherapy or neuro surgical

procedures.

Complete pain relief may be achieved by abolition of consciousness (e.g. by administering a general anaesthetic) but this is an impractical method of treating pelvic pain.

### CONCLUSION

Chronic pelvic pain, a common gynaecological complaint, needs great patience and care in its evaluation. In assessing it, other non gynaecological conditions should also be borne in mind and excluded. In addition, a strong psychogenic overlay may be present and it may be the presenting symptom in a woman who is sexually frustrated or one who needs someone to talk to and pour out her worries. Sympathy and understanding should be extended to these patients and if no organic disease is found, symptomatic therapy or psychotherapy may be all that might be necessary.

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# Neoplasms of the genital tract

DR. T H Lean FRACS, FRCS (G), FRCOG

The age-standardised incidence of cancer in the Republic of Singapore is 143.6 per 100,000 persons per year for females. The five most frequent cancers among females were:—

Breast	...	18.3
Cervix	...	16.2
Stomach	...	16.4
Lung	...	14.9
Colon	...	7.4

It appears that the incidence of cancer in Singapore females, standardised for age, is among the highest in the world. Those of us who are looking after the health and welfare of the female population in Singapore need to be well aware of this outstanding fact.

Genital Cancer in Singapore as exhibited by cancer of the cervix occupies second place in total incidence and follows closely behind the incidence of carcinoma of the breast. In the discussion of the latter condition, there is merit for a specialist gynaecologist to undertake the responsibility of screening in conjunction with his responsibility for screening of the genital tract.

## SCREENING FOR GENITAL CANCER

The advent of cancer screening by means of the Papanicolaou Smear has been well received and become established as a necessary routine. Current practice, on the average will obtain a pick-up rate of 0.3 per cent. Thus for example the Cancer Screening Unit of the National Family Planning and Population Board of Singapore in 1976 screened a total of 31,371 cases — 96 per cent were negative smears and only 88 cases or 0.3 per cent were abnormal significant smears. The Papanicolaou smear however represents only a first stage in the approach to Cancer Diagnosis. An abnormal smear will need to be confirmed by biopsies including a cone biopsy if at all in-situ cervical carcinoma is to be diagnosed.

Some recent approaches for the early detection of endometrial carcinoma involves:

- a) Fine Endometrial Brushes and a cytological smear
- b) Uterine aspirations with or without curettage but using the MR (Menstrual Regulation) equipments

Further up the line, the early detection of cancer of the ovary and the fallopian tubes are now made possible by the advent of fibre-optic endoscopy, and laparoscopy and its technology makes it now easier to screen for early cancer of these two organs.

No new advances in screening techniques are described for the early detection of cancer of the vagina or its adnexae and the simple Papanicolaou technique will apply as well for these lesions.

## CURRENT OUTLOOK

### A Carcinoma the Vulva and Vagina

Carcinoma of the vulva occurs with very reduced frequency and this is particularly so in Singapore. In any single year at the Kandang Kerbau Hospital — perhaps no more than two (2) cases of such lesions are found. In contrast, at the St Mary's Hospital in Manchester where the outpatient attendance is only one-twentieth of that of Kandang Kerbau Hospital, an average of fifteen cases of carcinoma of the vulva are seen per year.

It is difficult to give the reasons for this situation. The precursor lesion of leucoplakia is also not seen with a high frequency but it is easily recognised and should be observed very closely when it is discovered. By and large the diagnosis of carcinoma of the vulva and vagina should pose no difficulty since these are "Open" lesions. There has been no new advance in the management of carcinoma of the vulva. The sensitivity of these tumours to irradiation remains poor and radical surgery remains the main stay for treatment of such lesions. Modification in the type of radical surgery is that of local

vulvectomy and gland dissection — claimed to be equally good and presenting with less morbidity and more rapid recovery especially for the old and debilitated who are the most likely to be affected by these disorders. With vaginal malignancy, the upper one-half of such lesions are treated as for carcinoma of the cervix and the lower one-half qualifies for consideration of treatment as for vulval cancers.

### **B Carcinoma of the Cervix**

The prognostic outlook for an established case of carcinoma of the cervix remains much the same — there being no new recent advances worthy of commendation. Even Chemo-therapy will find few advocates for in some cases, the attempt to cure by chemo-therapy is far worse than the disease itself and there may be some truth to say that indeed chemo-therapy hastens the end rather than prolong life. In good hands, radical surgery can achieve a relative 5-year cure-rate varying from 60 to 78 per cent for all stages of the disease as long as operability exists.

Refined techniques in the application of radio-therapy have tended to reduce complications and no doubt improve the overall cure-rate. Radio-therapy has also in instances improved the prospects of operability and hitherto inoperable cases have been made operable. Certain centres have made combined radio-therapy and radical surgery as standard treatment and have shown that combined treatment in good hands show a better survival rate — 82 per cent 5-year survival rate for Stage I cases and 65 per cent for Stage II cases.

The diagnostic approaches for cancer of the cervix have now become so well established that no one should really miss a case. Cytological smears, colposcopy, selective biopsies or cone biopsies have varied acceptors at varied centres. However, it is also clearly shown that cervical cancer can be prevented or at least detected early in its course in more than one-half of the patients afflicted. Also, it appears that in about 10 per cent of cases, cervical cancer cannot be prevented. The most hopeful situation of would-be afflicted with cervical cancer would be early detection — the Stage 0 — and immediate treatment. Simple surgery cures as high as 100 per cent.

Clearly a medical practitioner has a responsibility in the early diagnosis of such lesions.

### **C Fallopian Tube Carcinoma**

This must surely rank as a rare tumour and most times, diagnosis of such lesions are made

after operative procedures have been carried out. However, the advent of laparoscopic techniques has made early pre-operative diagnosis possible. The paucity of conflicting symptomatology makes the problem more difficult and in such situations where cervical and body lesions are ruled out, laparoscopy should be resorted to and appropriate biopsies made. By and large, the treatment for such a lesion is Surgery — simple straight surgery — total hysterectomy and bilateral salpingo-oophorectomy followed by irradiation. Chemo-therapy finds less supporters.

### **D Carcinoma Corpus Uteri**

This type of malignancy is primarily a disease of peri-menopausal and post-menopausal women and in Singapore, there appears to be a falling incidence of this disease — less than 1. The reported incidence in Singapore is 4.8 as compared to India 24.7 — Norway 16.2 and USA 19.4.

The diagnostic approach to this problem remains an easy one since most if not all lesions exfoliate. Cytological smears from the vagina can pick up these lesions, and uterine aspiration techniques — including endometrial brushes and jet-washers are adjuncts in confirming the diagnosis. Being a less malignant disease, treatment for such lesions appear to be less complicated. The different stages of the disease decide the type of treatment. Early lesions can suffice with straight surgery. Radical surgery do not appear to improve the result. The addition of radio-therapy is favoured by most centres which have shown that irradiation pre-operatively reduces the incidences of vault recurrence. It has been also shown that Progestogen therapy has now come to be established as a useful adjunct in the treatment of recurrent endometrial cancer, especially in those cases who had already received both surgical and radio-therapy treatments.

Current survival rates range from 70 per cent to 85 per cent of five year cure rates. It is established that for those who survive the first seven years of the disease, such cases can be considered as being cured of the disease.

### **E Carcinoma of the Ovaries**

To my own mind, ovarian malignant neoplasms represent one of the most malignant neoplasms of the female genital tract especially if occurring in the very young patients. Death appears to be very rapid and the end very disheartening for these young patients and similarly for those patients whose terminal situation appears very close. The incidence of ovarian malignant neo-

plasms in Singapore is however one of a low order averaging from 1.04 to 1.39.

Diagnosis again in most cases is one of retro-spection only after removed specimens are sent for histological examination. As explained earlier, recent advances in endoscopic techniques should make available occasions for earlier diagnosis of the lesions and it is important to bear in mind that early diagnosis sometimes can alter the prognosis greatly. Some useful guidelines in the management of ovarian carcinoma show that all cases — Stage I, II and III should have pelvic clearance involving abdominal total hysterectomy and bilateral salpingo-oophorectomy. The presence of small peritoneal seedlings calls for added irradiation therapy.

With masses that are residuum and that are larger than 3 cms radiation is an adjunct in therapy with surgery and chemo-therapy. The more

useful chemo-therapeutic agents are the alkylating agents, phenylalanine compounds and chlorambucil and tri-ethylene triphosphoramide. In most cases it has been shown that surgery alone is inadequate and there is an average relapse rate of 50 per cent. Adjuvant therapy with chemotherapy and perhaps irradiation should be given in almost all cases. The use of colloidal gold intra-peritoneal and the use of progestogens have been unsatisfactory in immediate results. However one series in North Carolina have obtained good results with Colloidal Gold achieving a survival rate of 94.4 per cent but this result has not been reproduced at other centres.

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# Psychological Problems encountered in Singapore children

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Psychological disorders in children are not disease entities but symptoms and reactions caused by emotional disturbances or environmental disturbances. Fundamentally it is the faulty development of the personality and not any organic disease in the body that is responsible for behaviour disorders.

The first important thing to realise in the management of behaviour disorders is that these psychological disorders are due to maladjustment of circumstances which are not under the control of the child. The child as we see him clinically is not only the product of his inherited equipment but the product of his environment on his inherited potentialities.

Secondly, for the first five years of life, the whole development of the child's personality depends on the environmental influence of his parents, especially the mother. It is important in the management of psychological disorders to establish this parent-child relationship.

Thirdly, individual variations in behaviour disorders occur and no two children suffering from the same disorder can be treated alike.

In Singapore, both in hospital and in general practice, the predominant type of paediatric problem is related to disease but now with the present state of rapid urbanization and social evolution the child is subjected to increased pressures and psychological problems are increasing.

Let us now consider some of the psychological problems encountered in children here.

## **Cyclical Vomiting**

The digestive symptom is the first to attain special importance in the course of the child's development and is one of the first to respond to any disturbance of the child's well being.

Nausea and vomiting are easily provoked by any physical illness like pharyngitis or tonsillitis and equally may be the first symptom of an

emotional cause. In the school-child, the underlying cause may be in the home or the school environment. Pushing at studies by over-ambitious parents, unhappiness of some kind at school, anxiety laden parents, fussing at meal-times and forcing food are some of the common causes.

## **Case Illustration of Cyclical Vomiting**

J.G. was a two year old Chinese girl seen for vomiting over a period of two days. There was no fever preceeding the vomiting, but the child was noted to be pale, peevish and off-colour. The vomiting was forceful and associated with retching and abdominal pain. At first solids were vomited, later even milk, and later liquids leading to severe weakness and dehydration. On physical examination, there was very little to note, except for an injected throat. The child had been treated by the general practitioner with antibiotics and glucose drinks. In the ward, she required an intravenous drip for a day or two. All radiographs and barium meal X-rays proved negative. These attacks of cyclical vomiting occurred periodically every two or three months over a period of four years.

Family history revealed that this was an only child belonging to educated parents. Every effort was made to determine the underlying cause or trigger mechanism and it was found that the primary fault lay in both parents who were constantly in disagreement about the child's upbringing. It was difficult to treat the parents but eventually the episodes of vomiting were less and gradually ceased once the child began schooling at the age of six years. She appeared happy at school and got on well with her peers, but soon developed a new behaviour disorder, namely bronchial asthma.

The birth of a second child into the family did

not improve matters as the second child even at the age of three years was unable to take solid food. Her diet had to be mashed to a liquid state. Obviously the tendency to stick to milk and a fluid diet was a tendency on the part of the child to remain in an infantile state.

Thus in this family, we see three psychological disorders in two members of the family, where the fault lay in the parents who were constantly in friction with each other. The interparent relationship was difficult to restore.

### **Obstinate Constipation and Soiling**

In the early months of life, the response to the stimulus of rectal distension is immediate and unpredicted passage of faeces. By being given a chance at suitable movements and praise from the mother, the child is conditioned to go on to the pot and not on his napkin.

Rectal distension is difficult to define and children are often unable to respond to questions about whether they have a feeling of rectal fullness or can sense the passage of a stool.

Secondly, the motor element of the external sphincter and the pubo rectoanal sling of the levator ani make up the striated sphincter together with the smooth muscle of the internal sphincter. These two types of muscles serve different functions. The striated muscle is able to contract strongly to prevent the passage of a stool at an inconvenient time when it is forced down by a rectal contraction wave. This sphincter can only function for up to 30 seconds or so, long enough to contain the rectal contraction wave till it passes.

The internal sphincter can maintain persistent tonic activity so preventing leakage of stool between periods of rectal activity by maintaining closure of the resting anal wall. Thirdly, rectal motility to accommodate faeces is important as well as the mechanical support of muscles anchoring the anus, which allow the muscles to act at a mechanical advantage.

The development of patterns of bowel behaviour fluctuates as the child matures and the acquisition of bowel control must be understood in terms of growth, maturity, and personality differences rather than in habit forming and learning (Gesell Ilg and Ames 1974). The developmental task is to achieve a working balance between contraction and relaxation and at first each comes under voluntary control separately. By 18 months, an articulate child is able to indicate when he wants to go to the toilet and by 3 years old bowel function is fully acquired and becomes a private affair behind a closed door.

Training goes on but some children make no progress at all having bowel movements on the toilet.

This can lead to disappointment and emotional tension in parents particularly when habitual holding back of the stool leads to overflow incontinence or soiling of the pants. The call to stool is diminished in the presence of an enlarged rectum and the absence of the stretch required to produce the sensation of fullness.

Nothing pleases a child more than to have the whole house revolve round his bowels. The mother often fusses over his bowel movements, a major domestic issue with moral overtones. The child resents being over-controlled and the frequently high standard of obedience asked for results in faecal retention. Retention of faeces that was voluntary at the beginning becomes an established and persistent habit.

### **Case Illustration of a child with idiopathic megacolon:—**

E.H. was a nine year old child admitted with obstinate constipation over a period of 7 to 8 years. The child would be constipated for periods of 10 to 14 days and initially required suppositories but later the mother had to administer the enema herself. Eventually E.H. reached a stage when she refused to have any enemas and she refused to tell the mother if she did not move her bowels. This continued leading to faecal soiling and that made the mother bring the child to hospital. The child's appetite was good but as the mother was out all day, the child would help herself ad libitum to sweet drinks, chocolates, sweets and noodles.

Family studies revealed her to be an only child, born normally and developed normally but the parents had adopted a boy, three years younger and it was obvious that the child resented this brother.

Both the children were brought up by servants as both parents were busy with their business projects. The father was hardly at home not even on weekends, because of frequent overseas business trips. The mother was a perpetual nagger, nagging about the child's enemas and suppositories. The child had hostile feelings towards her adopted brother, particularly when the father paid more attention to him. At school she was happy with her friends but these friends seldom visited her at home, as her mother would yell at her friends, if they rang up.

Physical examination revealed a child who was attractive and boyish, weighing 26 kilograms which was at the 97th percentile using local

standards and measuring 132 cms which was at the 75th percentile using local standards. She had a very distended abdomen measuring 23 inches and on palpation the abdomen was loaded with faecal masses. She was very stubborn and hostile towards her mother, whose key subject revolved around the child's bowel habits.

Rectal examination revealed a very distended rectum. The following investigations were done:—

Haemoglobin was 11 grams % and the peripheral blood film showed hypochromic cells. The serum iron was normal, being 110 micrograms %, and the serum folic acid was normal, being 18.8 ug/ml. The serum cholesterol was also normal. Radiographs of the abdomen revealed constipated faecal material in the ascending colon and the hepatic flexure while the transverse and sigmoid colon were empty. A barium enema showed a dilated caecum and colon with normal haustrations. There was no organic obstruction. The clinical diagnosis was that of an idiopathic megacolon with soiling.

In the hospital wards, the child ate well and was put on abdominal exercises which made her lose about one kilogram. She also had a daily bowel training programme and was able to move her bowels once every day. However, on return home, she reverted back to her former habit of constipation.

Psychological examination done by the psychologist showed the following scores on the W.I.S.C.

Verbal IQ of 79

Performance Scale IQ of 100

Full Scale IQ of 88

The child was recognised as one of low average ability. She was well aware of her intellectual weakness having been reminded of these by her parents and her teachers almost ad nauseum. She was reluctant to admit that she couldn't do the harder items on the W.I.S.C. despite reassurances that she was not expected to cope with everything. She was easily discouraged and extremely sensitive about her inability to cope. Basically, what has gone wrong here is that pressures which failed to recognise the very real limits of her intelligence and her reactions to this insensitive and unenlightened approach has resulted in this behaviour disorder of obstinate constipation. Faced with such an approach, the child was bound to react in unacceptable ways, much of her reaction being heavily loaded with aggression.

The attitude of the father was interesting in that he was too involved in business affairs to be

even concerned about his daughter's symptoms. He had hopes of her achieving high standards of intellectual achievements. His hopes for the child had to be realistic in view of the W.I.S.C. findings and expecting the impossible would only increase the psychological damage that had already been done.

A boarding school was suggested by the mother and this would certainly improve her present frustrating home environment but a school where academic standards are all important would not be suitable for her. The boarding school must show an interest in the lower ability range and one that would not pressurise her further would be required.

#### **Enuresis (Bed-Wetting):**

Enuresis may be defined as the "involuntary passage of urine beyond an arbitrary age limit of three years and in the absence of relevant organic disease. The latter proviso differentiates enuresis from urinary incontinence in which the lack of bladder control is clearly due to organic abnormality of the urinary system or its nervous supply. From the patient's history, it is possible to clarify enuresis according to the level of consciousness at a time of voiding and whether bladder control at that level has been previously and reliably attained. Primary nocturnal enuresis is the child who wets only in his sleep, and has never had more than one month of consecutive dry beds.

#### **Incidence:**

In western countries, the incidence is 10% in 5 year old children and 5% in 10 year old children.

#### **Sex Differences:**

Male children are more commonly affected than female children.

#### **Family History:**

In enuretics, a family incidence is reported in three quarters of cases. One or both parents are enuretics. The figures are higher if siblings and cousins are included. There is a higher concordance rate between identical twins compared with dizygous twin pairs.

#### **Social-economic grouping:**

Most studies report an inverse relationship between socio-economic states and enuresis. This may reflect many factors including differences in toilet training techniques, poorer toilet facilities,



among the disadvantaged or differing expectations of bladder control.

#### **Intelligence:**

The intellectual abilities of enuretic children follow the normal distribution of intelligence. Intellectually, retarded children may need additional help with toilet training but enuretics should not be left untreated simply because the child is considered retarded.

#### **Aetiology:**

The common aetiological factors fall into 4 main groups:—

##### **a. Physical disease**

One has to exclude urinary tract disease, spina bifida, balanitis or phimosis, diabetes and epilepsy.

##### **b. Symptomatic or psychological disorder**

Emphasis is usually placed upon the wetting as a symptom of the child's basic anxiety or underlying conflict. In practice, it is difficult to distinguish between emotional problems that cause enuresis and the emotional effects. Although obvious participants such as the birth of a new baby starting at school or the loss of a parent, can be seen at initiating the bed wetting, they may not be clearly still active by the time the child is referred for help.

##### **c. Faulty toilet-training**

In some cases, failure to attain bladder control can be related to inadequate or conflicting training. Parenteral expectations vary and the parents who have a vested interest in seeing them as young and as delicate will oblige with complete primary enuresis. The continued wearing of napkins does not encourage bladder control.

##### **d. Developmental Lag Theories**

Many enuretics show a tendency to "immature" or even epileptic EEG patterns. Their voiding is due to a failure to acquire reliable cortical inhibition of the reflex voiding that is normal in babies and younger children in response to a rise in intravesical pressure.

Most bed wetting occurs as the child lightens from deep stage 3 or 4 to a dream sleep. Wetting just before the child wakes in the morning is related to the dream sleep period that occurs prior to waking. During stage 3 and 4 deep spontaneous bladder contractions occur which raise the intravesical pressure above the threshold at which reflex voiding occurs. Such children have smaller bladder capacities and exhibit diurnal frequency. From a developmental point of

view it seems reasonable to consider most cases of primary enuresis as demonstrating evidence of a delayed development of cortical inhibition of a normal neonatal reflex.

Various factors may interfere with the learning of bladder control at a critical age, but the prevalence of a family history, and the sex difference suggest hereditary factors may be important. Habit formation and secondary emotional effects contribute to its persistence.

#### **Clinical features:**

Enuretic children seeking medical help fall into three main clinical groups. The majority fall into the primary category. In 60% of cases the wetting is at night only and in 30% the enuresis is complete. At day-time wetting occurs only rarely.

The type one is one where there is primary nocturnal or complete enuresis and urgency wetting. Very often there is a family history present. Emotional disturbance is often the result of the enuresis.

The second type is the stress induced enuresis where the secondary enuresis is usually nocturnal. There may have been a previous history of enuretic episodes. Bladder control is unstable and the precipitating stress may be no longer current.

The third type is day-time enuresis, and usually secondary or complete or bladder control may have been acquired early. There are intrafamily conflicts often present plus other behavioural problems. Wetting may represent parenteral confrontation or may be imitative of a newborn sibling's wetting, ie. jealousy or regressive enuresis.

#### **Management of Enuresis:**

Any realistic treatment programme must aim at not merely to eradicate the child's symptoms but also to resolve any active causative factors and deal with the response of the child and his family in the wetting.

##### **(1) General Management**

An adequate history and routine examination may reveal a family background of enuresis or epilepsy. It should also permit categorisation of the type of enuresis and reveal the inter-play of emotional factors. Any punishment of wetting or rewards for unattainable goals of dryness should be strongly discouraged. Wet beds should be accepted without undue comments. The child and the doctor should appreciate that diuresis is a common disorder that is not reliably indicative of severe emotional disability, retardation or sin.

**(2) Special techniques** are useful to aid the acquisition of bladder control or to eliminate wet beds whilst the enuretic habit is broken.

**(a) Lifting**

Since many diuretics wet the bed at an individually constant phase of their sleep it is sometimes possible to pre-empt the occurrence by taking the child to the toilet during the day. It is not necessary to waken him and the aim is not to teach the child to waken himself. The technique is seen more as a method of obtaining dry beds whilst the enuretic habit is broken.

**(b) Fluid Deprivation**

There is no evidence that the withholding of fluids before retiring is effective.

**(c) Medication**

The most widely used drugs for enuretics are the tricyclic anti-depressants, imipramine and amitriptyline which have now displaced atropine. They produce Detrusor inhibition and bladder sphincter activation. Another possible mode of action is their impairment of the transition from stage 4 to the R.E.M. sleep during which enuresis occurs. The usual dose of imipramine at night time is 10 mgms, with a maximum dose of 25 mgms. The gradual withdrawal should be attempted when control is achieved, re-instating the drug as necessary. You will have to reassure the family, stressing the need to prevent accidental consumption by the younger siblings.

**(3) Star-Chart**

Giving the child a chart or calendar on which he can stick a star for each dry night provide him with dramatic reassurance as to his progress and his parents with a framework for small rewards if they wish. It also provides the doctor with an accurate record of progress from which dosage requirements can be calculated.

**(4) Bell and Alarm Pads**

It works on the principal that when the child wets a special sheet he completes an electrical circuit that rings an alarm and awakens him. The object is not to teach him to awaken in response to a full bladder but to become aware of the sensation of a filling bladder so that cortical inhibition of the voiding reflex can forestall the noxious effects of the alarm.

**(5) Psychiatric Treatment**

Psychiatric referral is indicated in those cases in which the emotional sequelae or presumed precipitation of the enuresis are not thought likely to respond to reassurance or counselling. Although most children show a dramatic improvement in their adjustment within the family and at school in response to the realistic management of the enuresis it is necessary to remember that the wetting may be merely the presenting problem of a child with many other difficulties.

**Temper Tantrums**

Temper tantrums are common in the pre-school child when the period of emotional growth is greatest. It is surprising how cleverly the child can choose the time and place when giving in becomes a necessity, eg. when there are visitors or guests in the house, temper tantrums prove difficult. During a tantrum there must be no fight, anxiety or argument to stop his behaviour. Scolding a rebellious child is like pouring petrol on a burning fire. It is essential that the mother herself should not lose her temper. A tight smack may help in the beginning, but once a child is hysterical, this will not help. The best way to treat a temper tantrum is to ignore it. On no account must the child be the centre of the stage for his effort. He should not be given what he wanted after the tantrum. Once he finds he can achieve nothing by his tantrums, he will stop having them.

**Head Banging**

This is mainly a problem of the toddler and rarely continues into school-age. The toddler repeatedly bangs his head on hard objects, a wooden chair, a table the wall or the floor. A favourite place for rhythmical head banging is the end of the bed. Children find a peculiar solace in banging the head. One sees head bangers with bruises on the forehead. Head banging is nearly always a manifestation of insecurity. It has been produced in experimental animals by rearing them with social and visual deprivation.

**Thumb Sucking**

All children suck their thumbs at one stage or other. Thumb sucking is associated with ear pulling, hair pulling, twisting or handling of the genitalia or rubbing of the nose or a soft ball or blanket. Freud wrote that "thumb-sucking" is a model of the infantile sexual manifestation. Thumb-sucking is associated with hunger, shyness, teething, fatigue and sleep. It may disappear at 5 months only to reappear when a new tooth

appears. Thumb sucking is most common in hospital babies who are emotionally deprived. One can imagine a child's reactions when his individual personality or individuality is not recognised. As Illingworth writes "A doctor comes in regularly to see the child and the child is held down by nurses where needles are pushed unexpectedly into his back and thighs causing great pain. Nobody picks him up, however much he cries and he is thought by everybody to be spoilt. No one realises that this is a normal reaction for a baby of his age, who has firm attachment to his mother. "It is not uncommon, therefore, to find thumb sucking in hospitalised and in institutionalised babies and children. Much can be done to prevent these psychological disturbances if a mother is allowed to stay by the side of the child. If there are no facilities for the admission of the mother, frequent visiting should be encouraged.

### **Stealing**

Stealing is quite common among school-children, and stealing is the commonest juvenile crime. Moffat (1969) studied a family history of stealing, parental unconcern about the child's dishonesty, parental separation, both parents being at work, and excessive strictness and insecurity. As Illingworth states, other factors are: tacit approval for the child's dishonesty, overcrowding at home due to lack of privacy, the fear of being inferior to others because he has less pocket money and he may steal in order to give money to a friend in order to court popularity. It is common to hear that a child steals at home, and this results from a faulty child mother relationship and stealing may be an act of aggression against his mother. At school it may result from the influence of a gang.

### **Case Illustration of a school-girl who steals:**

A.T. was a 14 year old school-girl, known from the age of 5 years old because at that stage she had generalised convulsions. She was the eldest of 3 children and was a full term baby at birth, and developed normally. Her developmental milestones were normal. EEG done in 1966 depicted grand mal epilepsy, and antiepileptic drugs controlled the convulsions, and she had no convulsions after the age of 6 years.

In primary 1 and primary 2, she was third from the bottom and in primary 4 she refused to appear for the examinations. At the age of 9 years she was assessed by a psychologist and her verbal IQ was 111 while her performance IQ was only 75. The discrepancy between verbal and

performance IQ could be explained by the fact that epilepsy could have affected her spatial — perceptual motor ability.

In 1975, the parents brought the child up because she was stealing money from them at home. The stealing had gone on for 3 years. Initially, the stealing consisted of odd bits of money left around the house and the parents later locked away all their money. The child soon gained access to the keys and started stealing money from locked cupboards. She stole from her parents and paternal grandmother and used the money to buy story books, records, tapes and pop-music. She was given adequate pocket money, and the parents discovered that she drew her post-office account, without their knowledge. In school, there were no complaints about stealing but academically she had reached Second 4 and failed yearly. At this stage, when she was 14 years she was assessed intellectually and her scores were as follows:—

Verbal IQ was 90

Performance IQ was 93

Full Scale IQ was 91

It would be noted that the wide discrepancy between verbal and non-verbal sections, noted in earlier testing, had disappeared, and the results are now clustered at the lower end of the average ability range. The child had well-defined limitations and this point was made clear to the parents. It was unfortunate that her younger brother was much brighter and altogether more successful. The parents admitted in the past they had drawn attention to this fact and had tried to get performance acceptable to her brother's standards, and she had come in for criticism on this score. The only results being (a) to build a marked resistance to learning situations (b) to undermine her confidence.

The relationship between A. T. and her parents was not good. She seldom communicated with them to any extent and never confided in any of them. The father noted this tendency and decided to leave the child alone. There was little verbal interaction between the parents and the child and the child saw this as a rejection. The stealing episode suggested a strong element of emotional deprivation. The child did experience a lack of certain qualities in her inter-family relationship, and the money she took from the parents was used to buy things for herself. She had a big appetite most of the time and was interested in consuming lots of chocolates, ice-cream and other delicacies, all of which typify the deprived personality.



To a certain extent the stealing may be stigmatised for extra attention. The child felt that she was the least significant member of the family, the older brother being able to succeed and gain parental approval while the younger brother being the baby got fussed over by everybody else.

She was a sensitive girl, well aware of her inadequacy. In school, she was not allowed to forget that her performance was low. She was boyish in her outlook and preferred to be a disc jockey or a police woman and wanted very badly a motor-bike which her parents disapproved of.

The parents were interested parents but had not realised what had gone wrong before. They had not realised that the child's present status resulted from a cumulative build-up of factors within the family and at school. The comments by the parents that she was not doing well enough, that her younger brother was rapidly overtaking her, and she was stupid and a disappointment to her parents — all these and many more were directed against her all these years and contributed to the present feeling of failure and low self confidence. The psychologist explained to the parents the part played by attitudes in shaping response-patterns and emphasised the need to examine these attitudes with a view to changing them. They realised that an improvement in the child's behaviour would not appear overnight and it was something for which they had to work very hard.

### **Masturbation**

Masturbation is almost universal in children. It can occur in infants, especially girls from the age of one week or two. There is often a peak incidence at the age of 3 to 6 years and a rapid rise in the incidence at 11 or 12 years, reaching a peak at 14 to 16 years. In young children, masturbation is commonly carried out by rocking forwards and backwards when sitting astride the arms of a chair.

The child may become flushed in the face and have an orgasm. The nature of the episode is not recognised by the parents; at puberty the child may feel a pressing need for masturbation.

One should realise that masturbation is entirely normal, and that sooner or later, virtually all children will indulge in it, whether boys or girls. The second essential point to realise is that it is entirely harmless and the only thing that does harm is the attitude towards it. If the parental attitude is such that the child feels guilty in masturbating then it may certainly do harm by causing worry, anxiety and harm.

Masturbation should be ignored except when it is carried out in public in which case the undesirability of this should be explained to the child in a matter of fact, and non-punitive manner. It is only harmful to the child if he is made to feel guilty or to feel there is something wrong about it.

If the parent does catch the child masturbating, the attitude adopted should be ignorance of the act. The children should certainly not be scolded or made to feel ashamed and the parent, must certainly not be shocked because it is normal and inevitable. If anything is said at all, they may be reminded that it must not be done in public and should not be done outside the home.

It is possible that if a young child feels insecure, and unhappy he may masturbate as a solace just as other children do in sucking the thumb.

### **Case Illustration of a child with masturbation:**

J.M.D. was a 4 year old boy referred because he had been masturbating for over one year and had stammering speech for one year. He was a normal baby at birth, and developed normally. His symptoms began about one year ago when the parents had to shift their home because of the father's new job and the child lost the companionship of his friends. The family lived with friends until they found proper accommodation and it was then that the parents noted the child masturbating. Initially, the act was only once a day but of late the act was about 4 to 6 times per day, sometimes alone in the presence of friends. Sometimes the child would slip away from friends and roll on to his stomach and roll into the prone position and manipulate his genitalia. When the parents or sister caught him in the act, they reprimanded him. There had been no complaints about the child at school and he did not masturbate in school.

The child had developed speech normally and spoke well, but about the time of the shift of homes, stammering was noted.

Physical examination revealed an attractive boy who was physically normal. There were no signs of precocious puberty. No abnormality could be detected in the heart, lungs and abdomen and the external genitalia were normal. The reflexes were normal.

Intelligence tests on the Stanford Binet (From C to M) showed that his IQ was 123, which was well above the average — ability range, and this would approximate to a level of mental development of slightly over the 5 year level. The child's behaviour was not compatible with this finding.

He had strong regressive tendencies, which found direct expression in his remark "I would like to be a baby". Interestingly, this was the phase which the child uses to describe masturbation. The child appeared an insecure child, particularly at a time when they were living in a hotel and in friends' homes before they settled down. He made quite a lot of demands on his parents, particularly the mother, and being an intelligent child he was able to manipulate adults.

The masturbation tendency had been aggravated mainly by the uncertainty of the mother in how to deal with it, who was clearly very upset and worried about it. The child sensed her lack of confidence and had exploited the situation more than he would have done, if his mother had acted confidently at the beginning.

In the management of the child it was explained to the parents that masturbation was quite common in young boys and that it appeared in various forms and that it tended to alter in frequency sometimes disappearing completely and then starting up usually in response to some environmental change.

Both parents were asked to discuss the habit with the child and they were to remind him that there were certain things which people do not do in the presence of others — masturbation being one of them. If they found him masturbating in his own room, they should make no comment, but interrupt him by directing his attention to some other activity. If he masturbated in public the parents should register disapproval making it clear that they were annoyed because he had been disobedient.

The parents felt very happy and reassured after the interview and they kept the child busy and interested and the act of masturbation disappeared. He was looking forward to his new school and in activities available in various pursuits in the new school, his interests would be stimulated even further. An optimum prognosis was given to the parents.

### **Sleep Problems**

Almost some children at some stage or other have some disturbance of sleep. The problems include delay in going to sleep, awakening and calling for the mother, sleep-talking, sleep-walking, night-aches and restlessness to sleep. The problem all begun during the preschool period mainly between 6 and 12 months of age.

The problems involved with failure to go to sleep are:—

#### **1. Habit Formation**

Between the ages of 6 and 12 months, it is

common for a baby to discover that if he screams when put to bed or if he screams when he awakens at night, the mother will come to him, lift him up and cuddle him. He knows just what to do to get what he wants. The habit is allowed to begin and the longer it continues the more difficult it is to stop him. The child's crying is attributed to terrible wind or to teething or to indigestion or to pains. This habit will continue for years and will certainly continue into school years.

#### **2. Differences in sleep requirements**

Children differ in their sleep requirements. The active wiry child, in general, needs much less sleep than the fat placid ones. The older child needs less sleep than the younger ones.

#### **3. Fear of the dark**

The child may be frightened of the dark by shadows cast on the wall, by the rustle of curtain and by the wind. Fear of the dark may be overcome by a night-lamp.

#### **4. Overfatigue**

If a child goes to bed too tired, he may sleep badly. If a child goes to bed too soon, and is not tired he cannot be expected to sleep. It is worthwhile, adjusting the child's bedtime if there is difficulty.

#### **5. Parental Overanxiety**

Parents frequently go to the children's room to see if they are alright. It is totally unnecessary and many children may deliberately stay awake for their parents to visit them at night.

#### **6. Indiscipline**

The parents should discipline their children with regard to their going to bed and avoid long hours at T.V. sets till late at night.

### **Management**

The parents are made to keep a check of the child's sleep patterns and it will soon be seen that the sleep pattern is not as bad as that depicted. Sedatives are avoided except if the child had yelling attacks so as to disturb the whole household.

### **Recurrent Abdominal Pain**

A survey in the United Kingdom show that 1 in 9 school children had at least three attacks of abdominal pain over a period of more than 3 months. More than 1 in 4 females at the age of 9 years had this syndrome. These are interesting

differences in the age distribution between boys and girls.

### **Aetiology**

Although many organic causes exist, any single one is quite rare. Renal and gastrointestinal causes are about equal. Rare extra abdominal causes include spinal disease and porphyria. Gastro-intestinal causes include congenital bowel abnormalities, peptic ulceration, recurrent intra-susception, regional ileitis, tumours and air swallowing.

The most important causes in the renal tract are recurrent urinary tract infection and hydro-nephrosis, other urinary tract disorders being extremely rare. In the majority of patients, the cause is emotional, and as Apley points out, "It is just as necessary to learn and practise the appropriate techniques to elicit and interpret accurately the signs of an emotional disorder as it is those of a physical disorder". The diagnosis of an emotional disorder always requires evidence of psychopathology not mainly the absence of evidence of an organic disease. In most cases, recurrent abdominal pain reflects emotional stress to the child and commonly similar reactions to stress occur in other members.

### **Diagnosis:**

The history usually provides the only positive evidence on which to base diagnosis. It must be comprehensive and go beyond the attacks of pain. Some questions to keep in mind are "Why did the patient present now?. Whose idea was it? How did it start? When did it occur? What does the patient think it is wrong? What are the gains? What do the parents expect? What sort of child is this patient? Factors commonly relevant in the aetiology include death or separation in the family, physical illness, hypochondriasis, or chronic illness or handicap in parent or sibling, marital discord, psychological illness in parents, unsatisfactory parent child relationships and school problems. The pain is described in vague terms, poorly localised of gradual onset and of variable frequency and duration.

The paediatrician's immediate duty is to make reasonably sure that no serious organic disorder is being missed but he should also be reasonably sure that no serious emotional disorder is being missed or even made worse.

### **Management:**

The interview is the most important therapeutic instrument and as in other emotional disorders, management involves alteration in

mother-child emotional relationship.  
Medication is not indicated.

### **Head Banging:**

Head banging occurs in children from six months onwards. It is harmless to the child but sometimes causes bruising. It occurs most commonly in bed and may be part of sleep rituals, it also occurs in the daytime from frustration and anger, and it usually goes on up to 2 to 3 years but sometimes persists much longer. It is sometimes indicative of an emotional disorder, and may occur in mentally subnormal children but most commonly occurs in children of normal intelligence.

### **Trichotillomania:**

Trichotillomania is hair plucking. In the mild form it is insignificant but in the severe form it is likely to have quite marked emotional disturbance. It is this not the hair plucking which requires treatment, and the symptoms must not be ignored. Some children swallow the hair and this gives rise to hair benzoars in the gut.

### **Nail-Biting:**

An everyday problem of the everyday child. It occurs in 50% of children at one time or another. It most commonly occurs at the age of 8 to 10 years. It is usually noted incidentally during examination for something else, and is certainly related to an emotional state but the treatment is seldom called for.

### **Teeth-Grinding:**

A common and a harmless practice, although the primary dentition may apparently be ground down; it is not related to worms. It occurs in mentally subnormal children but most often in normal children.

### **Tics:**

Tics occurs in children from the age of 7 to 12 years. It can be reproduced deliberately, momentarily and abrupt and occurs at irregular intervals. It is stereotyped and more pronounced under stress, and ceases during sleep. The differential diagnosis is from Sydenham's chorea in which movements are not stereotyped and muscle weakness and inco-ordination may be found. It is always indicative of an emotional disturbance for which treatment is required.

### **Bronchial Asthma:**

One is very familiar with the school child who is seen with recurrent episodes of asthma. The



wheezing occurs suddenly out of the blue sometimes with no upper respiratory tract infection. The asthmatic child is often of a highly strung personality, intelligent at school and asthenic in build. It is well known that the attacks become less frequent as the child grows older and matures and attacks at puberty are infrequent.

There are numerous other psychological problems which I have not touched upon.

### **Management of Psychological Disorders:**

In general, the management of psychological problems can be divided into the following groups:

#### **1. Physical Illness:**

All physical illness must be excluded which may be responsible for the introduction of the disorder.

#### **2. Play Therapy:**

Play therapy is the sheet-anchor in the treatment of behaviour problems in child guidance clinics. By simple drawings, paintings, modelling, story-telling, things which are troubling the child are brought to light. This method itself is a form of therapy.

#### **3. Psychotherapy:**

When investigating the case, if you feel the case is getting beyond your depth, it is time the patient be referred to a psychiatrist. More harm will be done to the child by an inexperienced person penetrating too deep in the field. Persistent cases are referred to the child guidance clinics which are centres for the organised and scientific study and treatment of the maladjusted child.

The principle in child guidance clinics is not only to remove the particular behaviour for which the child has been referred but to treat the child as a whole in his total setting. The total personality of the child is studied and treated in order to make him better adapted to his environment and to bring about harmonious relationship between himself and others.

There are two types of psychotherapy namely re-education psychotherapy and psychoanalysis. The problem is solved not only from the physical angle but from the psychological angle by trying to get down to the root of the trouble. It is the re-educative psychotherapy that is used in the

management of behaviour disorders. Psychoanalysis becomes necessary in psychiatric cases. A change of environment is only considered when the home is really intolerable and when the parents are totally inadequate or where adequate diagnosis is impossible without a period of observation in a different environment.

Finally, the most important part in the management of psychological disorders are the parents. When the root of the trouble has been definitely discovered, if one parent is at fault one should tackle the problems very cautiously in order not to break up a home. Psychological disorders should be corrected early before they become fixed habits.

### **Conclusion:**

Today, the vast ocean of physical illness in children is receding visibly and the cliffs of psychosomatic and psychological disorders are getting larger and more threatening.

We are convinced surely the earlier the psychological disorders are treated the more likely is the patient likely to grow up and enjoy good health. What is more important is that the child guidance activities should be extended into the community to influence parents, the teacher, school-doctor, family doctor, paediatricians and psychologists, in a truly prophylactic way.

### **Acknowledgements:**

I would like to thank Mr. Marshall A.H. Smith, consultant psychologist, Singapore, for the psychological assessment and help in psychotherapy in some of the children, and to Professor Wong Hock Boon, Head of the Department of Paediatrics, University of Singapore for permission to publish the article.

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## Fourth Convocation & Dinner & First Sreenivasan Oration The College of General Practitioners, Singapore

Sunday, 19th November, 1978, may be considered one of the most important days in the history of our college, for on this day was held the First Sreenivasan Oration. The Oration was named after the late Dr. B.R. Sreenivasan, the first and Founder President of our College, and one of the most illustrious family physicians in Singapore.

The Council of the College had also decided to hold the Fourth Convocation of the College on the same occasion, to confer the Honorary Fellowship on a distinguished family physician from Malaysia, Fellowships on two of our foremost members, and Diplomate membership on our nine successful candidates.

By 7.10 pm. on Sunday night, about 200 members and guests were seated in the Stamford Room of Hyatt Hotel. Then, to a fanfare of trumpets, the graduands of 1977 and 1978, Fellows and Council members of the College walked in dignified procession down the centre aisle, to take their respective places in the front of the hall and on the rostrum.

The programme opened with a welcome speech by the Chairman of the Organising Committee, Dr. Fred Samuel, followed by an Address by the President, Dr. Victor Fernandez.

Next came a most impressive Citation by the Public Orator before the President of the College conferred the Honorary Fellowship on Dr. Manacadu K. Rajakumar, the Chairman of the Council of our sister college in Malaysia.

This was followed by the conferring of Fellowships on Dr. Gordon O. Horne (in absentia) and the late Dr. Timothy Liok Yew Hee (received on this behalf by his son).

There was no convocation in 1977, and the Fourth convocation this year was held to award diplomas to the 1977 as well as the 1978 successful candidates in our examinations.

Of the 1977 Diplomate members, Dr. Chan

Swee Meng, Dr. (Madam) Ho Gien Chiew, and Dr. Lim Kim Leong were present to receive their diplomas from the President of the College. Drs. Chung Sin Fah and Hee Wan Jang, both of Malaysia, received theirs in absentia.

Of the 1978 Diplomates, Drs. Loh Wee Tiong and Yeo Peng Hock were present for their diplomas; Drs. Hew Kin Sun and Moti H. Vaswani were conferred theirs in absentia.

The College has always advocated the teaching of general practice/family medicine to undergraduates, and for many years now, medical students have been attached to active general practitioners/family physicians for a short period of clinical teaching. The students are assessed at the end of their posting. In 1977, the top three students in the general practice examinations were Dr. Lum Chun Fatt and Dr. Wong Hak Yui (who tied for first place) with Dr. (Miss) Yap Hui Kim taking the third place. These three, now housemen, were present to receive their book prizes. The top three students (Fourth Year) in 1978 were (Miss) Chua Chor Hiang in first place, followed by Messrs Gordon Tan Wee Teck and Lee Shoo Kim. All three were present that evening.

The highlight was the Oration. As the President of the College said in his Citation, it was fitting that the first Oration "be delivered by our immediate Past President ... who succeeded Dr. Sreenivasan in office." Dr. Wong Heck Sing is one of the more successful general practitioners in Singapore, a dedicated and sensitive doctor, and one who has always believed in and practised the ideals of general practice/family medicine.

The Oration was entitled "The Future Singapore General Practitioner". Dr. Wong gave a clear and concise speech, comprehensively and logically laying out the ideals and training required to produce the future G.P. for Singapore. The speech was well received, and Dr. Wong was per-



**Dr Wong Heck Sing — Immediate Past President of the College — delivering the First Sreenivasan Oration.**



**The President, Dr Victor L Fernandez, the Censor-in-Chief, Dr Evelyn Hanam and the Vice President, Dr Fred Samuel leaving the rostrum at the end of the Convocation Ceremony.**





**The President, Dr Victor L. Fernandez, sharing a joke with some of our distinguished guests.**



**The Vice President, Dr Fred Samuel, playing the role of the charming host.**

sonally complimented by many colleagues and students.

After the successful conclusion of the evening's proceedings, members and friends moved to

the adjoining hall to enjoy an excellent Chinese dinner. It was an occasion for reminiscing and celebrating, and all present agreed that the night had been a fitting culmination of the College's programme for 1978.

K.L.

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## WONCA 8th World Conference at Montreux, 1978

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The 8th WONCA World Conference on Family Medicine was held in Montreux, Switzerland from 14 to 19 May 1978. It was an impressive affair with over 1,200 family physicians from all over the world attending. Although Singapore sent in only a handful of delegates our doctors by avidly participating in the various workshops soon became known to many.

The President of WONCA (World Organisation of National Colleges and Academies of General Practice) Dr. Stuart Carne was of course an old friend of ours. As the honorary medical officer of the Royal Air Force it was fitting that the R.A.F. band played at the opening ceremony.

The plenary session on the first day was on the "future of the family physician". There was no lacking in papers here and opinions expressed ranged from the developed EEC countries like Holland and Germany to less developed places like our own Singapore. Dr. Wong Heck Sing presented a paper for Singapore which was very well received.

The workshops on the second day centred on topics as diverse as medico bibliography to the role of the doctor's wife. One is always surprised by the amount of discussion that can be generated by participating audience at these sessions.

The theme for the Third Day was on the G.P.'s role in Family Counselling. Dr. Koh Eng Kheng presented a paper on this. It was heartening that papers read by our doctors caused Dr. J.S. Norell of the Royal College of General Practitioners to advise the gathering to heed the experience of the Singapore doctors.

The sessions on the last day were concerned with International Classification of Health Problems in Primary Care and problems in medical publications.

Montreux is a beautiful place to hold a medical conference. It is sited on the shores of the beautiful Lake Lemman and the tranquil air is just right for contemplative discussion. What was not so beautiful were the prices one had to pay for things in Switzerland and this despite the fact that the hotel rates were specially lowered for delegates attending the Conference.

A medical conference is never all work and no play. Delegates were entertained to dinner on the Swiss pleasure steamers which cruise on the lake. It took three of these steamers to accommodate all the delegates and their wives and a marvellous time was had by all.

Our College is a young college and we have to continue to send our delegates abroad firstly to learn about what's happening amongst the other colleges, and secondly to let others know what's happening in our own College. Without these conferences it would be difficult to establish our ties with our sister colleges on such an amiable and understanding basis.

The 9th WONCA World Conference on Family Medicine will be held in New Orleans, United States, in October 1980. There is however the regional South East Asia WONCA conference to be held during September 1979 in Manila. It is hoped that more of our College members will avail themselves of the opportunity to keep up with what's going on in general practice by attending these conferences.

EK.

## MEDICAL NEWS

### BETTER PRESCRIBING

Dr Flemming Frølund, BMJ, 1978, 2, 741

Better prescribing implies that our present method of prescribing drugs is not good enough. Why is this, and can we make it any better? The more obvious and traditional reasons include lack of knowledge of medicine in general and clinical pharmacology in particular, the unnecessarily large assortment of drugs that are available, and the often unbalanced, overoptimistic, and persuasive information on drug treatment. There are, however, other aspects of prescribing that are rarely mentioned.

We have to distinguish between rational prescribing on a clinical-pharmacological basis and realistic prescribing for the individual patient. Rational drug treatment is a narrow concept that regards the patient as an object of therapeutic decisions, and is more concerned with, for example, the fate of drug in the body than with the patient as a human being who has personal characteristics, problems, and feelings. Often a patient may not take the drug, in which case it does not help to know all about bioavailability and pharmacokinetics. This may be clever prescribing but it is not treatment.

Realistic therapeutics accepts that the patient may not take his medicine, and that prescribing is not the same as treatment. It appreciates the patient not as an object of therapeutic intentions but as a person who has to share the responsibilities of co-operation. It combines clinical and clinical-pharmacological knowledge and skill with insight into the social and psychological complexities of human beings. We doctors should think more of performing on the terms of our patients and of putting aside some of our customary reverence for our teachers and textbooks. Realistic therapeutics is an amalgam of science, experience, attitudes, and communication, and so there must be continuous interaction between doctor, drug, and patient.

Obviously doctors must make repeated adjustments of their knowledge about disease and clinical

pharmacology. They should be familiar with a reasonable number of drugs, and should appreciate that skilled use of a few alternatives may ensure that the patient takes the drug. Patient differ in their likes and dislikes, and superior bioavailability and other pharmacological properties may be of little avail if the particular preparation is unacceptable.

### "MARRIAGES MORE STABLE WHEN HUSBAND IS SMARTER THAN THE WIFE"

This provocative headline appeared in the Sunday Times of 12th November 1978.

"Higher intelligence in the husband is accepted here as a factor for stable marriages, said psychiatrist Dr. Wong Yip Chong yesterday.

"Males, he said, prefer wives with lower I.Q. Women respond to this preference. When this is not the case, instability generated can snowball through the years until it breaks up the marriage.

"Dr. Wong told a forum on the Breakdown of Marriage that Westerners do not tolerate large differences between the spouses' intelligence.

"but cultural factors here seemed to favour this ....."

### "HYPERTENSION THE MOST COMMON CHRONIC ILLNESS HERE"

"Hypertension is Singapore's most common chronic disease, but most of the affected people are not aware of their condition.

"Results of a national blood pressure survey published in 1974 showed that every seventh Singaporean above the age of 20 had hypertension, said the Senior Minister of State (Foreign Affairs), Mr. K.C. Lee, yesterday when he opened the National Heart Week.

Mr. Lee went on to say that "hypertension remedies should not be confined to diet control, change of eating habits, physical exercises and taking anti-hypertension drugs.

"A lot of people carry their worries and anxieties to bed. The art of switching off the



mind, yoga, or allowing music, painting and other recreation to soothe the tired nerves after work are some of the preventive remedies recommended."

Straits Times, 18th November 1978.

**THIAZIDE DIURETIC IN ESSENTIAL HYPERTENSION Dr. R G Wilcox BMJ, 1978, 2, 383-385**

Medical Practitioners and especially family physicians are hard pressed to keep abreast of all the drugs for hypertension. The newer beta-blockers are expensive compared to the older drugs like the thiazide diuretics. There is a tendency to equate efficacy of a drug to its cost — the more expensive a drug, the better its effect is supposed to be.

In the study by Dr. Wilcox, Atenolol was compared with five other beta-blockers and a thiazide diuretic in a randomised cross-over trial of once-daily treatment of essential hypertension. Atenolol was found to be significantly better at reducing resting and exercise blood pressures at 24 hours than any of the other drugs and had a low incidence of side effects. Both timolol and acebutolol had a significant hypotensive effect at 24 hours and a low incidence of side effects, suggesting that further increases in dosage might be effective and well tolerated. Lobetolol proved ineffective when given once daily, and the high incidence of side effects, equalled only by pindolol, would probably prohibit further increases in dosage. Bendrofluazide was equal or superior to all the beta-blockers except atenolol at reducing resting blood pressure, and ITS CHEAPNESS STILL MAKES IT AN AGENT OF FIRST CHOICE IN MILD AND MODERATE ESSENTIAL HYPERTENSION.

**VIRAL HEPATITIS**

Viral hepatitis is a disease of public health importance in Singapore. It is more prevalent than typhoid fever. There is no specific treatment for viral hepatitis. The only measure that can be taken against the disease is to prevent its occurrence. However, epidemiological knowledge is insufficient to indicate how prevention can be achieved.

A group of experts representing a range of different medical specialities has recommended that the disease is made notifiable so that a body of information on the disease is available. Certain statistical and epidemiological information may be derived from these to determine further enquiries which it is hoped will lead to some practi-

cal measures to attempt to prevent this infectious condition. Accordingly, the diagnosis of viral hepatitis should be made on the criteria as scheduled.

**CRITERIA FOR NOTIFICATION OF VIRAL HEPATITIS**

1. Symptoms — ill health characterised by digestive upset for about one week preceded by loss of appetite, nausea and mild pyrexia and jaundice.  
(note: infants with obstructive jaundice syndrome are to be included for the purposes of these studies).
2. Clinical signs —
  - a. darkening of urine and lightening of the faeces;
  - b. liver enlarged and may be tender;
  - c. jaundice (rarely anicteric).
3. Laboratory findings —
  - a. leucopenia, urobilin or urobilinogen or bile in excess in the urine;
  - b. raised serum bilirubin and transaminase levels.

**SCABIES**

Scabies is a highly contagious condition and epidemiologically its prevalence rises periodically. Recently there were outbreaks in the drug rehabilitation centres among the inmates, and in the army camps. However, scabies tend to be underdiagnosed by the doctors, and if diagnosed, poorly or incompletely treated.

According to Dr. V.S. Rajan, the diagnosis should be entertained if a patient complains of generalised pruritis with nocturnal exacerbation. A similar complaint in close contact enhances one's suspicion. On examination papules, vesicles and pyoderma will be seen. Sites of predilection include the webs of the fingers, palms, wrist, elbow, axillae, nipples in females, umbilical region, genitalia in males, thighs and gluteal folds. In infants, the palms and soles may be affected simulating eczema.

The treatment recommended:

1. Following a warm bath, patient applies Emulsion Benzyl Benzoate from neck to soles. The emulsion should be applied to the entire body surface and not confined to affected areas only. The treatment is repeated 3 successive nights.
2. If there is secondary pyogenic infection antibiotics should be administered.
3. Following treatment with a Scabicide, an antipruritic to relieve the persistent itch should be prescribed, which can persist for 2 to 3 weeks.

4. If the disease is venereally acquired, do the VDRL test.
5. All close contacts of the patient, at home and work, and in camps, should be simultaneously treated.

(from Epidemiological News Bulletin, March 1978)

#### **MEDICAL COUNCIL**

The Minister for Health Dr. Toh Chin Chye has appointed Dr. Koh Eng Kheng to serve on the Singapore Medical Council.

#### **"HEART SWOP MAN IS DAD"**

Los Angeles, Mon — A 20 year-old man who has had two heart transplants has become the father of a healthy 4-kg baby girl.

Mr. Robert Dodge, of Los Angeles, underwent heart transplant operations in 1975 and 1976 at the Stanford Medical Centre in Palo Alto, California, because of heart failure. — Reuter.

(The Straits Times, 22-8-78).

**K.L.**

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#### **Announcement**

## **4th Regional WONCA Conference at Manila**

The 4TH COMBINED COLLEGES CONFERENCE AND SOUTHEAST ASIA REGIONAL MEETING OF W.O.N.C.A., has been scheduled on:

Dates: September 19-22, 1979  
 Venue: Philippine International Convention Center Manila, Philippines  
 Host: The Philippine Academy of Family Physicians, with the cooperation of the Philippine Medical Association and the Ministry of Health, Republic of the Philippines.

Central theme: "THE FAMILY PHYSICIAN IN SOUTHEAST ASIA TODAY"

#### **Member-Countries:**

1. College of General Practitioners Malaysia
2. College of General Practitioners Singapore
3. Royal Australian College of General Practitioners
4. New Zealand College of General Practitioners
5. The Philippine Academy of Family Physicians
6. Hong Kong College of General Practitioners
7. Sri Lanka College of General Practitioners

Registration Fee: US\$70.00 per person (if paid 45 days before Sept. 19, 1979).  
 (Late registration US\$100.00).

Sept. 19 1979.

Evening Reception & Dinner  
 by the Philippine Academy of Family Physicians.

Sept. 22 1979

Closing Session & Testimonial Banquet  
 Courtesy of the United Drug Company.

## Book Review

**"Medical Records in General Practice"**  
**Occasional Paper No. 5**  
**Royal College of General Practitioners**

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This is the fifth Occasional Paper published by the Journal of the Royal College of General Practitioners. The four preceding Papers are entitled "An International Classification of Health Problems in Primary Care", "An Opportunity to Learn", "Trends in National Morbidity" and "A System of Training for General Practice".

The authors rightly pointed out that "The general-practitioner service is the point at which the majority of patients enter the medical care system" and that "if a satisfactory information system is to be achieved, it will necessarily be dependent on the quality of the recording system and information gathering at the level of primary care".

They also noted that in the U.K. although medical care was provided under the National Health Service, medical records were independently collected by the three main branches of the Service, the general practitioner, the hospital and the local authority services. The record systems were found to be deficient and incompatible and their integration to provide information about the total health care of individuals or specific groups was impossible.

Arising out of these dissatisfactions and encouraged by many individual as well as group efforts and publications to improve on the deficiencies, they have come out with "a system that would allow for modifications and additions to be made when particular needs are to be met and additional facilities available". The additional facilities they have in mind are "data tape" recording and "computer linkage".

The objectives of the Paper are firstly, to give a description of the means by which the new record format is accomplished; secondly, to serve as a reference handbook which will give practical details on how to achieve the conversion; and lastly, to provide details of studies done in relation to some aspects of medical record keeping in general practice.

Is the Paper worth reading? I sincerely believe that it is essential reading for all general practitioners whether they are "conformists" or

"transformists". Doctors who would like to make general practice their vocation should study the Paper in meticulous detail. The proper keeping of medical records should be core-knowledge and part of the training for all general practitioners.

Chapter 5 (Patient Self-Administered Questionnaire) gives an interesting account of the development and evaluation of a questionnaire which depends on patients' cooperation to fill in basic medical/health information considered to be important to the general practitioner. The authors lamented that they were able only to achieve a return rate of 60%. I would consider this rate very satisfactory if the project was done in Singapore and taking into consideration the wealth of information required of the patient.

Chapter 6 (The Doctor's Knowledge of his Patients) is the most interesting study in relation to the keeping of medical records in general practice. The findings in this chapter are ego-shattering and most sobering. General practitioners were found to be deficient in knowledge of their patients' family and social histories. Serious illness or the cause of death of members of the family although having important bearing on the total health of the patient was in 81% of cases unknown to the general practitioners. In 15% of patients, the general practitioners did not even know their marital status. These were unfortunately not the only areas of ignorance of general practitioners. Even life threatening situations like drug allergies remained unknown or unrecorded in the medical notes.

The much vaunted claim that the general practitioner knows his patient well and knows him as a member of a family unit in a socio-economic setting appears to have been shattered by this investigation. I am afraid that general practitioners in any part of the world will fare no better than their British counterparts in this respect. This is not a statement of self-denigration but a honest appraisal of a too-much-taken-for-granted self projection. Seen in this light, the image cast in the mirror of truth does not appear to reflect someone else but of oneself whatever



one's skin tone and colour may be. Confucius said that if a person would not correct a recognised mistake, he would in effect be committing another mistake. A well formulated medical record system such as the one recommended in this Paper would certainly rectify many, if not all the areas of deficiencies discovered so far. Dare we commit another mistake?

Can the recommendations be followed? With modifications, additions and deletions to suit local needs and circumstances, the new format of medical recording is worthy of emulation. The

only impediment to its acceptance is perhaps the cost factor. Apart from a rather substantial initial capital outlay, the recommended new system requires a fulltime staff for its maintenance and upkeep. This may not be too difficult for a group practice to absorb but a solo-practice general practitioner may find its implementation cost-prohibitive. But then efficiency always exacts its own price — whether in monetary terms or in terms of other scarce human resources.

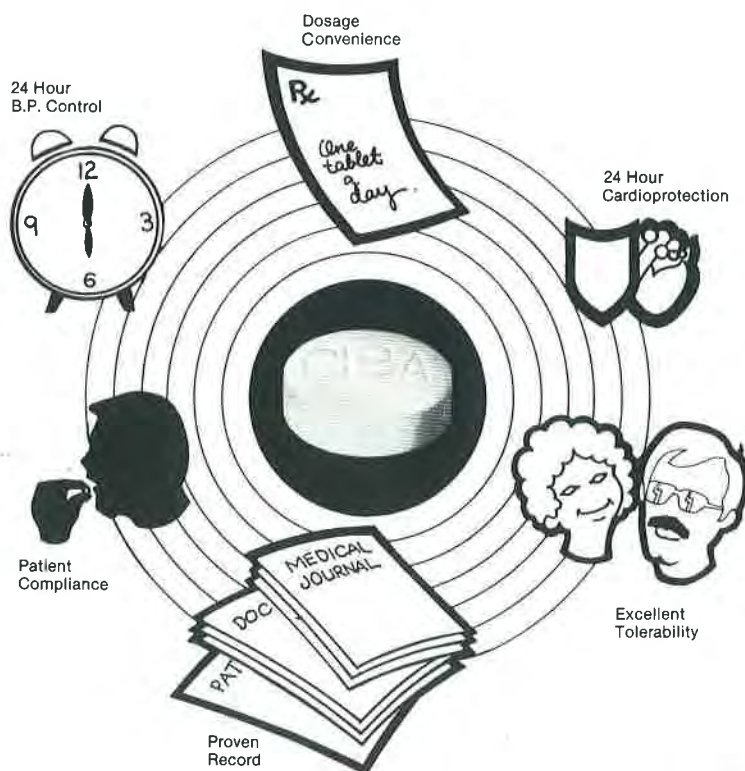
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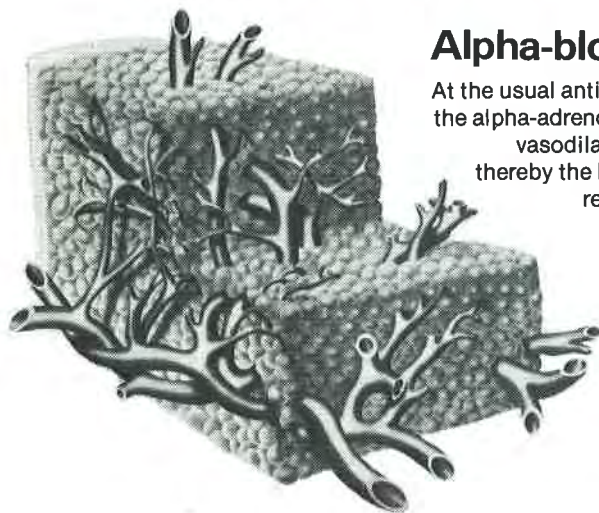
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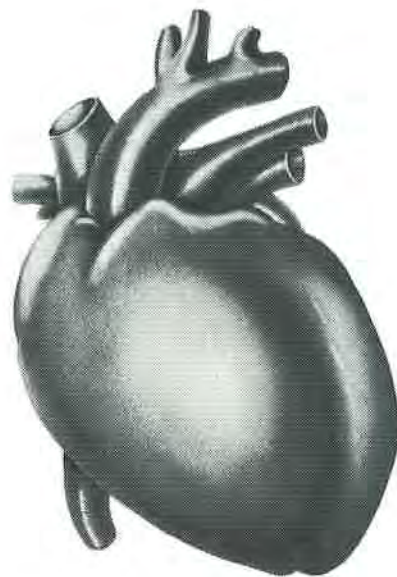
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