

The Singapore Family Physician



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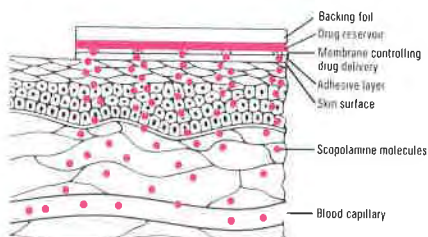
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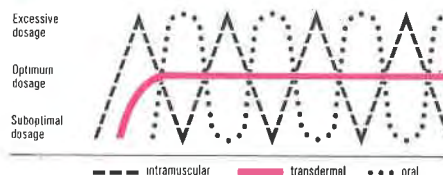
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THE SINGAPORE FAMILY PHYSICIAN

The College of General Practitioners Singapore
College of Medicine Building, Level 1 (Right Wing)
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EDITORIAL

TRIPARTITE RELATIONSHIP, TWO EVENTS, ONE COMMON GOAL

The tripartite relationship amongst the College, the University and the Ministry of Health has been central to two events in 1987 that the medical profession in Singapore can be proud of.

The first event is the recognition of Family Medicine as an academic discipline in the National University of Singapore. The second is the accommodation of the College, together with the Ministry and the Academy of Medicine, in the re-furbished Medical Faculty Building which has been renamed the College of Medicine Building.

These are events that culminate the vision and efforts of many in the College, the University and the Ministry towards one common goal namely, the uplifting of standards of medical practice in Singapore. It should be noted however, that the two milestones achieved are but the beginning of a new journey for members of the medical profession towards excellence, and this applies to general practitioners, specialists and medical teachers.

Recognition of Family Medicine

The College's efforts in developing the teaching of Family Medicine/General Practice, a seed its early pioneers sowed some 17 years ago, came to fruition this year when a Memorandum on the recognition of Family Medicine as an academic discipline in the undergraduate medical curriculum, submitted jointly by the College and the then Department of Social Medicine and Public Health was accepted by the Council of the National University of Singapore on February 13 this year.

The Department of Social Medicine and Public Health is given the responsibility of the undergraduate teaching of Family Medicine. To reflect this responsibility, the Department

of Social Medicine and Public Health has adopted a new name, the Department of Community, Occupational and Family Medicine (COFM). In this task also, the Department of COFM looks towards the continuing support of the College and general practitioners community, without whom it would not be possible to run the undergraduate Family Medicine teaching programme.

The general practitioner clinical tutors provide the practical exposure of the undergraduates to Family Medicine during the latter's one week posting out in the clinics. The GP clinical teachers' workshop held earlier in the year has helped to give shape to the Family Medicine teaching programme with regards to teaching content, uniformity and standardisation of teaching strategy. Out of the efforts of the workshop has come a GP posting handbook for the students together with checklists to guide the learning and teaching of the body of knowledge that defines general practice.

It is through conjoint efforts like these between the GP community and the University through the Department of COFM, that the discipline of Family Medicine in Singapore will be given form and substance. Relevant teaching, effective practice and viable research requires the continuous symbiosis of both the College and the University.

Opening of New Premises

15 August 1987 marks a milestone in the history of the College of General Practitioners. On this day, the College's new premises at the College of Medicine Building was formally declared open by Mr Howe Yoon Chong, the former Minister for Health. The College has increased its size seven-fold; it now occupies 7000 square feet of office on the right wing of the ground floor of the refurbished College of Medicine Building.

Mr Howe is to be congratulated for being party to the decision to restore the College of Medicine Building to its former glory. To him also, we owe a debt of gratitude for his part of including the College of General Practitioners, Singapore as an occupant of this Building. It is befitting that he should be the person to open the College of General Practitioners' new premises.

The College of Medicine Building, through which generations of medical doctors, pharmacists and dental surgeons passed, has been restored to its 1926 splendour. We share Mr Howe's hope that the Building will stand "as a focal point for the whole medical profession to come together not only to keep pace with rapid changes but also to advance professional knowledge and enhance medical education, training and practice in Singapore".

Partners in pursuit of Excellence

The housing of the Ministry of Health and the two academic bodies of medicine together symbolises a quantum leap in the partnership for pursuit of medical excellence. In opening the College of Medicine Building itself a day earlier, Dr Kwa Soon Bee, our Director of Medical Services/Permanent Secretary (Health) had this to say: "When the Government decided to provide accommodation for the Academy of Medicine and the College of General Practitioners in the College of Medicine Building, it was in recognition of the contribution of these two professional bodies in raising the standard of medicine and medical practice in Singapore. The Academy, for its role in postgraduate medical education and specialisation, and the College, for its role in uplifting the standards of family medicine and general practice. The Academy and the College have between them, organised many lectures, seminars and congresses, both local and regional, all of which have helped in upgrading the standard of medicine and medical practice in Singapore. The College

has also been instrumental in helping the Department of Community, Occupational and Family Medicine of the National University of Singapore set up a Family Medicine Unit. They are also contributing to undergraduate teaching of Family Medicine. Both organisations are now working with the Ministry and the Singapore Medical Council in developing a programme for continuing medical education on a voluntary basis. The Government had not only recognised their contributions in the past, but also believe that they have a role to play in the future. I would therefore like to call on the Academy and the College to join the Ministry of Health as partners in developing the practice of medicine to its fullest potential and in the pursuit of excellence for the benefit of all Singaporeans. The location of these two organisations and the Ministry in one and the same building will facilitate closer collaboration and cooperation and I am confident that having laid the foundation, the future augurs well for the practice of medicine in Singapore."

New Goals

What new goals should the College set itself? Three stand in the horizon. First is the continuing dialogue and support in the development and implementation of undergraduate teaching strategies. Second is the development and dissemination of practice-based research know-how, such that it can become a skill and tool that every practitioner can use effectively for self-audit, feedback and enlargement of the knowledge base of general practice. Research in this way moves from a sterile, paper-generating pursuit to discovery and perhaps documentation of how to do things better or how not to do things, something that the researcher himself profits most from and something that others can profit from vicarously. The third goal is the development of practical and relevant educational programmes in vocational training.

GLG

PARTNERS IN PURSUIT OF EXCELLENCE

Dr Kwa Soon Bee

Distinguished guests, ladies and gentlemen

Good evening and welcome to this evening's function to commemorate the re-opening of the College of Medicine Building. I extend a special welcome to our senior graduates, some of whom have travelled from Malaysia to be with us this evening. We are sorry that due to space constraints, we could only extend an invitation to those who graduated before the outbreak of the Second World War in 1941.

We have with us this evening, former deans, professors, consultants and heads of departments of the Medical School and government hospitals, as well as former Directors and Deputy Directors of Medical Services and senior administrators of the Ministry of Health.

Two whom I would like to welcome by name are Dr Yeoh Ghim Seng, Speaker of Parliament and former Professor of Surgery and Head of the University Department of surgery or Surgical 'A' Unit at the Singapore General Hospital, and Dr Andrew Chew, former PS (Health)/DMS and now PS (Ministry of Finance) (Public Services Division) and Head of the Civil Service.

We also have with us this evening two very special guests. The first is Mr Edward Tan Tiang Leong, great grandson of the late Mr Tan Jiak Kim. It may interest you to know that it was through the efforts of the late Mr Tan Jiak Kim that the founding of the Medical School was made possible in 1905. At the Opening Ceremony, the Governor, Sir John Anderson, in his speech said, "... I must

mention my friend, Mr Tan Jiak Kim, in this connection. It is not only the munificent gift (\$12,000) which he gave personally, but also the enthusiasm and energy which he threw into the work to enlist the sympathy and find his way into the pockets of his fellow Chinese that it is largely, almost entirely due to him that we see the institution started and started in such very hopeful circumstances..."

By 1909, the existing Medical School Building began to prove inadequate. At the beginning of 1910, Mr Tan Jiak Kim undertook to raise \$15,000 to defray the cost of a new building. He went to Malacca where he stayed a few days and returned with the news that Mr Tan Chay Yan would donate the whole sum himself and erect the building in memory of his late father, Mr Tan Teck Guan. The Tan Teck Guan Building was duly completed and occupied in 1911.

The second special guest who made this evening's function possible, is Mr Howe Yoon Chong. It was during Mr Howe's term of office as Minister for Health that the idea of a centre for postgraduate medical education in Singapore was first mooted. Mr Howe had, as early as in April 83, appointed a committee to look into the future use of the Faculty of Medicine Building. Mr Howe had always felt that such a historical building should be retained for posterity and for medical education. Not surprisingly, Mr Howe readily agreed to the committee's recommendation that the College of Medicine Building, when restored, be used to accommodate the Ministry of Health Headquarters, the Academy of Medicine and the College of General Practitioners.

In May 84, government approved the restoration of the King Edward VII College of Medicine Building to as near as possible to its original state and to have it preserved as an architectural heritage, in accordance with the

*Permanent Secretary (Health)/Director of
Medical Services at the Re-Opening
of the College of Medicine Building
on 14 August 1987*

recommendations of the Preservation of Monuments Board. Government also decided that after its restoration and renovation, the Building was to be used by the Ministry of Health as its Headquarters and also to provide office space at nominal rental to accommodate the Academy of Medicine and the College of General Practitioners.

Today is indeed a very special day. A milestone in the history of medicine in Singapore. It is not my intention to trace the history of the College of Medicine Building or that of the Medical School or the Medical Service. That will be done in the AV show which follows the opening and in the Exhibition down below. However, there are few buildings which feature as significantly in the history of medical education in Singapore as the Tan Teck Guan and the College of Medicine Buildings. Today, hundreds of doctors, dentists, pharmacists, scientists, medical technicians and many others who passed through their portals, still entertain fond memories of having received their training within these historic and impressive buildings. It was the handsome architecture and the long historical association with medical education which prompted the Preservation of Monuments Board to recommend that the Building be preserved as national treasures for posterity. In August 1985, the Preservation of Monuments Board also recommended that the Tan Teck Guan Building be preserved.

The re-opening of the College of Medicine and Tan Teck Guan Buildings is therefore an appropriate occasion to honour our pioneers of medical education and medical services who passed their knowledge, skills and sense of vocation to the generations of medical men and women who followed after them. Medical education and services in Singapore have certainly come a long way since the early beginnings. As we move forward into the future, the examples of our pioneers and predecessors become our guide and inspiration.

For 60 years from 1926, the College of Medicine Building has been the seat of medical education. The foundation stone of the 3-storey Building was laid on 6 Sep 1923 and the new Building was opened on Feb 15, 1926 by Sir Laurence Nunns Guillemard, then

Governor of the Straits Settlements.

I would like at this juncture to deviate a little, to draw your attention to the bronze plaque which has been installed on the wall between the large oak doors as you enter the College Building. On this plaque is inscribed the names of the 11 medical students who lost their lives within close proximity of the Building on that tragic evening of the 14th February 1942. These students had remained behind during the last few days of the war to serve the sick and the wounded. One of them, Mr Yoong Tatt Sin from Malacca, was killed by an exploding shell whilst on duty at Tan Tock Seng Hospital. His colleagues had got together to give him a proper burial that evening when shells began falling around them at the burial site, killing 10 of them instantly. It was indeed a tragic loss of lives of our early pioneering students. The plaque, which was originally installed at the entrance to Harrower Hall in Oct 1948, was then moved to KE Hall and recently transferred to its present location as a tribute to their sacrifices.

Datuk Dr Abdul Wahab, a senior graduate who is with us this evening, has vividly documented the events as they happened some 45 years ago, in a monograph which has just been published. This will be available at the foyer in front of the memorial plaque for free to any of you wishing to read more about the role of the medical students during the Second World War.

Today, the College of Medicine Building stands in its original splendour. The external facade of the Building has been restored. In the interior of the Building, a grand staircase has been added in the main lobby. A staircase was in the original plans of the College of Medicine Building but for some reason, was never built. The wide corridors and high ceilings have been retained. The beautifully sculptured ceiling of the Auditorium has been made in the mould of the original ceiling which had been damaged by fire. The small lecture rooms, laboratories and offices have been converted to modern offices.

These two grand and historical buildings, restored at a cost of approximately \$14.4 million, will now house the Ministry of Health Headquarters, the Academy of Medicine and

the College of General Practitioners.

With its excellent facilities, the Auditorium, the Lecture Theatres, Multi-Purpose and Exhibition Halls and Postgraduate Medical Reference Library, the College of Medicine Building can look forward to becoming a rallying point for the medical, scientific and paramedical professions. A venue to meet and keep in touch with the medical, scientific and technological developments, thereby contributing to the attainment of medical excellence in Singapore.

For the Ministry of Health, we are particularly happy to have found a new and permanent home. The more senior among you may recall that prior to Singapore's independence, before and immediately after the War, the Health Service was run by a government medical department in the Fullerton Building. In 1955, the Ministry of Health Headquarters was moved to a building in Palmer Road. The building was originally an aerated water factory and warehouse. When fire destroyed the building in 1978, the HQ moved to some British army officers' mess off Alexandra Road, and then finally to the Cuppage Centre in 1979, which place we are all familiar with.

When the government decided to provide accommodation for the Academy of Medicine and the College of General Practitioners in the College of Medicine Building, it was in recognition of the contribution of these two professional bodies in raising the standard of medicine and medical practice in Singapore. The Academy, for its role in postgraduate medical education and specialisation, and the College, for its role in uplifting the standards of family medicine and general practice. The Academy and the College have between them, organised many lectures, seminars and congresses, both local and regional, all of which have helped in upgrading the standard of medicine and medical practice in Singapore. The College has also been instrumental in helping the Department of Community, Occupational and Family Medicine of the National University of Singapore set up a Family Medicine Unit. They are also contributing to undergraduate teaching of Family Medicine. Both organisations are now working with the Ministry and the Singapore Medical Council in developing a programme

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Before I conclude, I would like to thank the many people who have played important roles in the restoration of the College of Medicine and Tan Teck Guan Buildings. Without them, we could not have the pleasure of sitting in this beautiful Auditorium in this magnificent Building. I would like to record my appreciation to INDECO, the project consultants, and in particular, their Project Architect, Mdm Jeanne Satria, who did all the research to ensure the authentic restoration of this Building and who went out of her way to accommodate our exacting demands; the Exhibition Committee led by Mr Lawrence Lim, who as the Director and Head of the Development Department of the Ministry of Health, was responsible for implementing the project. Members of the Exhibition Committee, in particular Prof Lee Yong Kiat, who devoted many hours of painstaking research for materials that went into the publication of the souvenir brochure and the Exhibition. To all of them, I say 'thank you'.

Many thanks also go to the National Archives, the National Museum, the National University of Singapore, the Straits Times Press, Ministry of Communications and Information, the Ministry of Environment, for access to their archives and historical records and for permission to use prints and photographs from their collections for the Exhibition.

A special word of thanks goes to the Director of the National Museum for the loan of the paintings from their art collection which you see in the entrance foyer and the art gallery.

Lastly, to thank all of you, our very special guests and friends for honouring us with your presence here this evening, for without you, there would be no such occasion.

Ladies and gentlemen, it now gives me great pleasure to once again declare open the

restored College of Medicine Building, its second in 60 years. I am sure that Mr Laurence Nunns Guillemard, the Governor of the Straits Settlements who opened the Building the first time in 1926, would be equally happy could he be around for this second celebration. Thank you.

SPEECH AT THE OPENING OF THE COLLEGE OF MEDICINE BUILDING, ON 14TH AUGUST 1987

Dr Lee Suan Yew
President

The Permanent Secretary (Health) and Director of Medical Services, Dr Kwa Soon Bee; the Deputy Director of Medical Service (Hospitals), Dr Chew Chin Hin, Honourable Guests, Ladies and Gentlemen. I am indeed honoured to have been invited to say a few words at this official opening of the College of Medicine Building. It is not common practice for tenants of such a prestigious and elegant building to allow a sub-tenant to say a few words.

The Council and Members of the College of General Practitioners, Singapore take special pride in sharing the same premises as the Ministry of Health and the Academy of Medicine. This is probably the first Ministry ever, in the history of Singapore, to have two academic professional bodies under the same roof. When the Academy and the College were about to be made "homeless", we were invited by the Ministry of Health to occupy this building. Nothing could please us more.

There is now no necessity to purchase or rent new premises. Can any person or organisation offer us a nominal rent of \$1/- per month for the space we are occupying? Can anyone or organisation offer a tenancy of ten years with a further option for another five years? We are so used to the "PAY AND PAY" Syndrome that when we are actually given something close to a gift some members become quite suspicious. The sceptics

cannot believe that these are the terms offered to the Academy and to the College.

Why do we need to be in such a magnificent building such as this to achieve medical excellence? We have done well in humbler surroundings. I think the opportunities are there. The time is right, and the conditions are set to reflect the mood, the zest and the vitality to strive towards greater heights. Medical excellence is after all for the benefit of our citizens. This building, as it were, reflects and embodies that enthusiasm and the high ideals of our health policy makers, our medical practitioners in the public and in the private sectors. Archaic methods of thinking and practice must give way to newer ideas and practices. While not forgetting our past, we must strive towards medical excellence in all sectors of the medical field.

On behalf of the College, I take this opportunity of thanking each one of you for all the help and encouragement in helping us set up the new College premises and the Joint Post-graduate Medical Library with the Academy of Medicine.

We look forward to closer co-operation with the Ministry of Health, the Academy of Medicine, the Singapore Medical Association and the Association of Private Medical Practitioners. Lastly, I wish to congratulate all those who are involved in the restoration of this magnificent building.

OFFICIAL OPENING OF THE NEW COLLEGE OF MEDICINE BUILDING PREMISES AND THE TENTH SREENIVASAN ORATION ON SATURDAY, 15 AUGUST 1987

Mr Howe Yoon Chong

Some years ago I played a part in the decision to restore the College of Medicine Building to its former glory. This task is now completed and it gives me great satisfaction to see the gracious old building being put to good use to house the Ministry of Health, the Academy of Medicine and the College of GPs. From time to time some people have criticized me for being insensitive with regard to the preservation of old buildings. This restoration of the College of Medicine Building will I hope prove them wrong. I am not against the preservation of old buildings but they must be historically significant and meaningful and can be put to practical use.

At least two good reasons spring to mind to justify the preservation and restoration of this building:-

- (a) Historically, it has played its part in raising the standards of public health and medical services in Singapore.
- (b) Today no one will build such a massive structure — much less one with impressive Doric columns and numerous enormous doors, like those you see outside.

Further on restoration it can serve the useful purpose of bridging the generation gap between doctors and be an important focal point for the whole medical profession to come together not only to keep pace with rapid changes but also to advance professional knowledge and enhance medical education, training and practice in Singapore.

Former Minister for Health

Local graduates will no doubt entertain fond memories of their sojourn here. They may revisit familiar haunts to relive happier days. Many may want to meet here to reminisce over old times, for an exercise in nostalgia, or to make new friends. Hopefully, the historic character and the special aura of this building will inspire our doctors to continue the distinguished endeavours of the early pioneers whose work has brought about the high standards and excellent quality of medical treatment and health care delivery that is now taken so much for granted by the Singapore population. With rapid progress in modern medical science and technology in an independent and free society, our doctors should do much better than their predecessors.

As good doctors you will no doubt raise your sights above the mundane and the nitty gritty and seek greater glory and job satisfaction in the pursuit of the highest ideals of your noble profession. You will put humanitarian service before that of amassing vast fortunes. As good citizens you will utilize your talents to serve the society rather than for self-aggrandizement. No one can object to GPs or specialist consultants wanting to look after themselves and their families. No doctor in Singapore is starving either. Those who are in temporary difficulty know that it is of their own making. As good citizens, doctors should be concerned with those who are less endowed or privileged and adopt an outward looking and progressive philosophy rather than one that looks increasingly inwards towards "how to improve the livelihood of the GPs", as a recent newspaper report would indicate. The medical community may be small, but you can exert stabilizing social and political influences far beyond your limited numbers or the confines of your professional practice. The less educated or competent among our population will often trust doctors and seek their assistance even in matters

outside normal medical treatment and health care. They need help and guidance otherwise they can easily be led astray. They have confidence in you. You must not betray this trust and confidence.

The time may have come for doctors to help the less capable in our democratic system to distinguish between what is right and what is wrong, and to guide and counsel them on what is in the best interests of the nation. These are extremely important civic functions for unless the majority of our citizens can make the right decisions on matters of national interest, our society can easily decline. Our doctors can discharge these functions without difficulty. Already there are stirrings among more and more doctors urging them to devote some time towards the preservation and enhancement of our political,

economic and social order. This welcome development will have far reaching benefits and consequences not only for doctors but for the society as a whole. Surely the continued stability, progress and prosperity of our society is worth some sacrifice on your part.

Peace, progress and prosperity in a young and independent nation like ours cannot be taken for granted. The oft-quoted saying that — "The price of liberty is eternal vigilance" — should provoke us into thinking deeper about our national problems. Vigilance goes much beyond standing by and watching. It calls for positive action. Whether each of us has done our part in being vigilant to safeguard our freedom and our political, social and economic order must be left to our individual conscience.

ACCIDENTS AND POISONING IN CHILDHOOD

Chao Tzee Cheng

P.P.A., M.B.B.S., D.C.P., D.M.J., D.Path.,
F.R.C.P.A., F.C.A.P., F.C.L.M., F.R.C.Path.

INTRODUCTION

Normal healthy children are active, curious, inquisitive, adventurous, ready to take on and try everything without thoughts of safety and consequences. Therefore they are prone to accidents and poisoning. Unless the adults take measures to prevent these, injuries and death can result.

Many of these cases will not be dealt with by general practitioners, as they are usually sent straight to the hospital bypassing the family doctors. Nevertheless general practitioners should be aware of these problems and be able to give appropriate advice to the parents, and be alerted to possible criminal intentions in the guise of accidents.

Accidents

In the context of this paper, only home accidents will be examined. First of all let us look at the statistics of home accidents as reflected in the attendance at Accident and Emergency Units of Government Hospitals. From the year 1979 to 1984, home accident cases attending the A & E units are in the region of 14% of the total attendance of accident cases. (Table 1) In 1985, this percentage had arisen to 21.1% (Table 2) and in 1986 it further escalated to 26%, (Table 3) and forms the majority of patients seeking treatment at the A & E units, surpassing Road Traffic Accident cases by almost double the number. This is an unhealthy state of affairs as most of

TABLE 1. ACCIDENT CASES REPORTED TO THE ACCIDENT AND EMERGENCY DEPARTMENTS OF SINGAPORE

Total	Total Cases Reported	Road Traffic Accident cases	Home Accident cases	Work site Accident cases	Sports Accident cases	Others
1979	100194	17245 17.2%	14112 14.1%	17702 17.7%	3807 3.8%	47328 47.2%
1980	103565	15025 14.5%	15168 14.6%	18179 17.6%	4570 4.4%	50623 48.9%
1981	116801	18932 16.2%	16763 14.4%	20053 17.2%	5124 4.4%	55929 47.9%
1982	110123	16630 15.1%	15376 13.9%	19004 17.3%	4602 4.2%	54511 49.5%
1983	135722	23301 17.2%	19471 14.3%	23912 17.6%	6115 4.5%	62923 46.4%
1984	130757	21291 16.3%	18578 14.2%	21760 16.6%	5437 4.2%	63691 48.7%

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these home accidents are preventable, and the pain and suffering encountered are unnecessary. However death from home accidents had reduced by 40%, dropping from 57 cases in 1985 to 34 cases in 1986. (Table 4)

TABLE 2. ACCIDENT CASES SEEN IN A&E DEPARTMENTS IN 1985

Total Accident Cases	117121	100%
Home Accident Cases	24707	21.1%
Road Traffic Accident Cases	18390	15.7%
Work Site Accident Cases	21981	18.8%
Sports Accident Cases	7203	6.1%
Others	44840	38.3%

Whereas many home accident victims sought treatment in the private hospitals and clinics; the figure for home accidents could be higher.

TABLE 3. A & E ATTENDANCE — 1986

Total Cases	365952	
Accident Cases	120728	100.0%
Home Accident	31422	26.0%
Work Site Accident	24988	20.7%
Road Traffic Accident	70072	14.2%
Road non-traffic Accident	5599	4.6%
Sports Accident	8467	7.0%
Assault	9263	7.7%
Others	23917	19.8%

TABLE 4. DEATH FROM DOMESTIC ACCIDENTS 1986

Falls and falls from height	20 (5)
Asphyxia from Drowning	1 (1)
Asphyxia from foreign body	7 (2)
Burns	2
Electrocution	1
Poisoning	3 (1)
Total	34 (9)

The percentage of children under twelve involved is shown in a three month survey at the A & E unit of the Singapore General Hospital from December 1986 to February 1987. Of the 3264 home accident cases seen, 904 are children under twelve years old or 27.7%. (Table 5) The death of children under twelve from home accidents are shown in the bracketed figures in the 1986 survey.

The most common injury seen clinically are those sustained in falls not on the same level as children are always jumping about. Next comes injury from knocking into objects; then burns and scalds. (Table 6) In 1985, 175 children under 11 years old were admitted to the burns centre of SGH for treatment of burns and scalds; 67.4% of these cases were caused by hot water, 13.7% were caused by hot curry, soup, noodles or porridge. (Table 7) These were mainly due to the carelessness of the adults by placing bowls too near the edge of the table, not closing tightly the cap on hot weater flasks and allowing children to go into the kitchen where they can upset pots and pans. In some other cases, electric cords on kettles were left dangling down, children passing by pulled the cord and the whole kettle of boiling water tumbled and poured down on them.

In cases of death from home accidents in children, drowning was the commonest cause comprising 26.75% of the total fatal accident cases seen from 1979-1985. (Table 8) The younger children were left drowned in bath tubs or basins while taking bath, as their guardians left them for a moment to attend to some other matters. They toppled over and drowned. Therefore it is essential that children under 3 years old are not to be left alone in bath. Another source of danger is the large earthen jars that are used to store water. Children between three and five tend to climb

TABLE 5. ACCIDENT CASES SEEN IN A&E DEPT OF SGH DECEMBER 1986 TO FEBRUARY 1987

	Road Traffic	Road Non Traffic	Home	Work	Sport	Assault	Others	Total
Cases seen	1302	557	3264	2151	726	818	2731	11549
Under 12 years	82	40	904	2	93	8	369	1498
Percentage	6.3%	7.2%	27.7%	0.01%	12.8%	0.1%	13.5%	13.0%

TABLE 6. ACCIDENTS OF CHILDREN UNDER 12 YEARS SEEN AT A&E DEPT, SGH AND ADMITTED TO WARDS (1.5.86 to 23.8.86)

Type of Cause of Injury	No. of Cases
Motor vehicle traffic accident	1
Accidental Poisoning by drugs, medicaments, biologicals.	3
Accidental Poisoning by other solid and liquid substances, gases and vapours.	1
Fall	92
Accidents due to natural and environmental factors	2
Accidents caused by submersion, suffocation and foreign bodies.	5
Struck by object or person	17
Accidents caused by hot substance or object, caustic or corrosive material and steam.	4
Suicide and self-inflicted injury	2
Homicide and injury purposely inflicted by other persons.	1
Total	128

over to reach for things that had dropped in it, and they would fall over and drown. Quite a number of children drowned this way while retrieving toys and other objects dropped inside. Therefore these jars should be properly covered up and not left exposed.

Older children are adventurous. They would like to swim in unconventional places like disused mining pools, ponds and other collections of water. These places are full of hidden dangers that may cause them to drown. Another dangerous place is the monsoon drains that swell up after heavy rain. Children like to swim or fish in there. If they are not careful, the swift current could carry them away. There had been several such tragedies lately and they were reported in the newspapers.

Death from falls and falls from height is also a common cause of accidental death in children. These are mostly due to falling out of windows without grilles. Children are curious, they would like to see what is happen-

TABLE 7. BURNS AND SCALDS CASES FROM HOME ACCIDENTS TREATED AT BURNS CENTRE, SGH — 1985

Age Group	Burned or Scalded by							Total
	Hot Water	Hot curry, soup, noodles or porridge	Hot Oil	Fire	Hot Iron	Hot Oven	Others	
2 months to 11 years	118	24	11	10	2	4	6	175
Percentage	67.4%	13.7%	6.3%	5.7%	1.1%	2.3%	3.4%	100%

TABLE 8. ACCIDENTAL DEATH OF CHILDREN (1979 — 1985)

Types of Accidents	0 — 4 years			5 — 9 years			10 — 12 years			Grand Total	% of Total
	M	F	Total	M	F	Total	M	F	Total		
Traffic Accidents — Pedestrians	9	4	13	18	12	30	13	8	21	64	26.34
Traffic Accidents — Cyclists	1	—	1	—	1	1	1	2	3	5	2.06
Drowning	11	11	22	13	8	21	19	3	22	65	26.75
Falls & Fall from Height	18	15	33	9	8	17	6	5	11	61	25.10
Asphyxia from Foreign Body	12	4	16	2	—	2	3	1	4	22	9.05
Burns	4	2	6	1	1	2	—	—	—	8	3.29
Electrocution	—	—	—	—	1	1	—	—	—	1	0.41
Hit by Objects	—	4	4	1	1	2	—	—	—	6	2.47
Suffocation	4	2	6	—	—	—	1	—	1	7	2.88
Others	2	—	2	—	1	1	1	—	1	4	1.65
Total	61	42	103	44	33	77	44	19	63	243	100.00

ing outside. If they could not reach the window, they would draw up a chair so that they could climb on it and reach. By that time they could lose their balance and fall out of the window if there are no grilles to stop them. Another source of danger is to place beds and tables next to the open window. Children playing on these could easily fall out. The simplest prevention is to install grilles on these windows.

Asphyxia from inhalation of foreign bodies is the next common cause of accidental deaths. Children like to put everything they find into their mouth. This could cause poisoning or choking. If they are not eating properly that could cause choking too. We have seen children choked on bananas, fishballs, milk, porridge, meat, nuts and peanuts etc. Good eating habits and discipline to the children are the preventive methods.

Strangulation is another cause of asphyxial deaths. These are usually due to ornamental chains or strings of pacifiers round the necks of babies. These if left on the neck while sleeping could cause strangulation when they are twisted round the neck. There had been several such cases. In babies who are brought to see you because of breathing difficulties do not forget to take a look at the neck in case there is a possibility of strangulation.

Poisoning

Accidental poisoning in childhood is a frequent occurrence all over the world. The most dangerous age group is toddlers from 1 to 3 years. They are active and curious, and tend to put everything they find into the mouth.

Thus the most frequent route of poisoning is by ingestion. Fortunately most of the substances swallowed by children are not very toxic and respond to simple treatment measures. Nevertheless it will cause anxiety and extra medical expense for the parents. As these are preventable it is prudent for parents to take special care in the prevention of accidental poisoning.

For the past three years from 1984-1986, there was a total of 116 children admitted to the Paediatrics Department of the Singapore General Hospital. This figure could have been higher if not for the fact that the University Department moved to Kent Ridge in the later half of 1986. It is shown in Table 9 that about 60% of children admitted are in the 1-3 years age group. All the poisons were ingested. The commonest being Western medicine in tablets form, next comes salicylates and detergents. (Table 10) Comparatively, the common poisons ingested by children in Australia are tablets, detergents and petroleum distillates (1,2) and in the U.K., tablets, lead and corrosives. (3)

The tablets that the children swallowed included iron pills, antihypertensive pills, tranquilizers, contraceptive pills and analgesics. These are pills that the adults take regularly or frequently and are left carelessly lying around within easy reach of the children. Some of them are attractively coloured so the children mistook them for sweets.

Salicylates are usually the medicated oils that are meant for external use. Detergents included Chlorox and washing powders. Again they were left around within reach of

TABLE 9. POISONING CASES ADMITTED TO PAEDIATRIC DEPT, SGH

Age Group (Year)	1984		1985		1986		Total	%
	Male	Female	Male	Female	Male	Female		
0 — 1	2	2	4	3	3	4	18	16%
1 — 2	10	3	10	3	1	9	36	31%
2 — 3	7	2	11	5	5	2	32	27%
3 — 4	2	4	2	3	3	3	17	15%
4 — 5	—	—	1	3	1	—	5	4%
5	2	5	1	—	—	—	8	7%
Total	23	16	29	17	13	18	116	100%

TABLE 10. PAEDIATRIC POISONING CASES SUBSTANCES INGESTED

	1984	1985	1986	Total	%
Salicylates	5	13	2	20	17%
Detergents	5	9	3	17	15%
Kerosene and Petrol	1	4	2	7	6%
Household Products	5	4	3	12	10%
Western Medicine (tablets)	12	5	9	26	22%
Western Medicine (solution)	3	3	4	10	9%
Mothball	2	2	2	6	5%
Others	6	6	6	18	16%
Total	39	46	31	116	100%

the children. Household products like finger nail varnish removers, shampoos and deodorants are also taken accidentally by children.

Some of the accidents are caused by adults negligently putting poisonous substances into bottles or containers for medicine or edible substances. For example an 11 month old girl was fed with 1 teaspoonful of Calamine lotion by mistake. Another 1 year old child was also fed Calamine lotion by his mother for diarrhea, thinking it was kaolin. A mother fed her 4 year old daughter with one teaspoonful of liniment mistaking it for cough mixture. A nanny gave a 2 year old boy flavine instead of vitamin syrup. Two children—one 5 years, the other 9, in separate incidents took paint thinner in an F&N bottle from the refrigerator thinking it was water.

Management of Poisoning

All poisoning cases should ideally be managed in a hospital, unless it is definitely certain that the amount ingested is insignificant. The aims of Management are:

1. Identify the poison.
2. Eliminate the poison.
3. Stop further absorption of the poison.
4. Support vital functions.
5. Promote excretion of poison.
6. Administer antidote when appropriate.
7. Treat complications.

Identify the poison

It is essential to know what poison you are dealing with. Therefore it is important to find

out what has been ingested and what is the quantity. Parents should spend some time to find out what their children had ingested and were there any remnants. These should be brought to the hospital for identification.

Eliminate the poison

The quickest way is to induce vomiting by giving syrup of ipecac. The dosage is 10 ml. for children below one year, 15 ml. from 1 to 5 years, and over 5 years 30 ml. Vomiting should commence in 18-20 minutes. If vomiting does not occur, the dose can be repeated once only. It is safe if the dosage is adhered to. However, ipecac is contraindicated in drowsy or comatose patients, in seizures, and when the ingested substance is petroleum distillates like kerosene petrol, turpentine, furniture polish, dry-cleaning fluid or paint thinner, and corrosive like bleach, paraquat or acids and alkalis. The vomitus should be saved for toxicological analysis. Induced emesis would remove about 30% of the substance ingested. Gastric aspiration or lavage should be performed if emesis is ineffective or contraindicated. This should be carefully evaluated and done by experienced personnel.

Stop further absorption of poison

Activated charcoal in powder form (25 to 50g. given down an intragastric tube after aspiration/lavage or emesis) is suitable for most poisons. Evaporated milk may be used for petroleum distillates. Sodium bicarbonate could be used for iron poisoning as it produces an insoluble carbonate.

Support vital functions

Keep a patent airway, ventilate with oxygen and treat shock with intravenous fluids or colloid solutions. Vasopressors and inotropic agents may be needed.

Promote excretion of poison

Forced diuresis, exchange transfusions, peritoneal and haemodialysis could be employed in appropriate cases. But these are best done in intensive care units.

Administer antidote when appropriate

Antidotes are available for about 2% of the known poisons, but the application in time can mean the difference between life and death. References can be made from the Handbook on the Management of Poisoning published by the Pharmaceutical Department of the Ministry of Health which is obtainable from the Ministry.

Treat complications

Local and systemic complications may arise from poisoning. Examples are cerebral oedema, convulsions, pulmonary oedema, cardiac arrhythmias, haemorrhage and oesophageal corropsion. These will require appropriate treatment.

Results of the treatment of Poisoning cases

Fortunately, none of the 116 cases admitted was fatal. Most of them (68%) stayed in the hospital for two days. (Table 11) In fact from 1980, there was no fatalities from childhood poisoning. However, it is still important to prevent such incidences from happening, to save unnecessary worries and expense.

TABLE 11. PAEDIATRIC POISONING CASES STAY IN HOSPITAL

Year	1 day	2 days	3 days	>3 days	Total
1986	5	16	9	1	31
1985	4	30	9	3	46
1984	3	22	13	1	39
Total	12	68	31	5	116

Prevention

What should a doctor do to prevent these poisonings? The doctor should only prescribe drugs that are necessary and always use a safer drug when there is an alternative. The patient should be told of the nature of the drug and potential dangers. Parents should be advised

to keep the drugs away from children. The drug dispensed should be in strip form or kept in child proof bottles and cabinets. Carry syrup of ipecac and activated charcoal in your medical bag and get the book on poisons when it is ready.

Child Abuse

One condition that the General Practitioner should be alerted to is "Child Abuse". When you see a child that comes in repeatedly for treatment of alleged accidents you should take notice that this could be a case of child abuse, especially when the injury does not tally with the story. The usual excuse given by those who bring the child in is that he is accident prone. But the injury sustained is usually more severe than the accident can cause, or in a position not possibly caused by the accident. You should probe into the story to find discrepancies. If there is any doubt, the Children and Youth Services Section of the Ministry of Community Development should be informed so that they could investigate. Likewise poisoning cases may signal the beginning of child abuse. Some parents may like to sedate their children with hypnotics and sedatives to keep them quiet. An overdose will cause poisoning. There was a case in U.S.A. where a 3 year old child was always admitted in a comatose state to the hospital whenever his parent went on a short vacation. In two or three days time the child would recover as they returned. This went on for a while until the hospital detected barbiturates in the boy's blood. Therefore you should be alerted to the possibility of child abuse in cases of accidents and poisoning.

Acknowledgement

I wish to thank Prof. Tan Cheng Lim, Head of Paediatrics Unit East, Singapore General Hospital for the clinical poisoning figures. The other tables are from my book on "HOW TO PREVENT HOME ACCIDENTS" From Federal Publications (1986). The 1986 figures are from records of the Department of Pathology, Singapore.

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GENERAL PRINCIPLES IN THE MANAGEMENT OF SEXUALLY TRANSMITTED DISEASES

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INTRODUCTION

The sexually transmitted diseases (STD) are a group of infectious diseases where the epidemiologically important mode of transmission occurs during sexual intercourse or intimate sexual contact. They are not exclusive for the sexual route. Transmission by blood and blood products and vertical transmission from mother to the newborn does occur and are of significant importance.

The sexually transmitted diseases of significant public health and clinical importance in Singapore include syphilis, gonorrhoea, chancroid, chlamydial genital infections, herpes genitalis, genital warts and the Human Immunodeficiency Virus (HIV) Infections/AIDS. Other sexually transmitted diseases of lesser public health importance because of lesser morbidity include lymphogranuloma venereum, granuloma inguinale, trichomoniasis, genital candidiasis, genital molluscum contagiosum and pediculosis pubis.

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Objectives of Treatment

The ultimate objectives in the management of the sexually transmitted diseases include not only the relief of the symptoms and signs of the disease and a cure whenever possible but also breaking the chain of transmission by elimination of the causative agent by effective treatment. The third objective involves early detection of disease in sex partners thus preventing morbidity from complications of the disease.

Therefore in formulating treatment guidelines or management plans in STD, public health considerations of reducing incidence and preventing complications must be combined with safe, effective and humane treatment of the individual patient's clinical disease.

One should realise that a clinician who administers effective treatment in STD is making a significant impact on the incidence and complications of STD in the community.

Basic Prerequisites

The basic prerequisite to effective management of STD is accuracy of diagnosis. With accurate diagnosis specific therapy can be instituted. Specific therapy ensures greater success of cure and also easier recognition of failure or complications.

The best way to arrive at a precise diagnosis is by identification of the infectious agent. This could be achieved by microscopy (as in Gram-stained smears or darkfield microscopy) isolation by culture methods,

antigen detection by non culture methods (immunofluorescence or enzyme immunoassay) or serological methods. One sexually transmitted infectious agent may cause a wide spectrum of clinical disease and at the same time one clinical syndrome can be caused by more than one STD agent and even non-STD agents. Thus identification of the causative micro-organism is essential for accurate diagnosis. In addition to arriving at an accurate diagnosis, identification of the causative agent would also enable a more precise test of cure. Furthermore when medico-legal problems (rape, child sexual abuse or divorce) are associated with STD, the identification of the causative agent will put the medical practitioners in good light.

A physician intending to manage a patient with an infectious disease must be knowledgeable in requesting the most relevant laboratory test and proper collection of the specimens. He should also possess ability in interpreting the results obtained in the light of the patient's clinical state.

Treatment Selection Criteria

In selecting therapeutic agents or treatment modalities the following criteria should be considered — effectiveness, safety, ease of administration, ease of compliance, side-effects and cost effectiveness.

The ideal treatment should be highly effective, achieving at least a 95% cure rate with a single course of treatment. This is important as treatment is to be utilised to render the patient non infectious so as to stop further transmission. The treatment should be non toxic and with minimal and tolerable side-effects. Safety in pregnancy and for use in children is important. It should be easy to administer and preferably as a single supervised dose. This ensures compliance. When the treatment involves multiple dosing, the treatment regimen should be easy to comply with. Finally the treatment must be cost-effective compared to the risk of complication and transmission of the disease.

Treatment on Presumptive Diagnosis

In view of the risk of transmission and complications, there is considerable urgency

to treat the patients early. Treatment of STD should be made on presumptive diagnosis after history taking, physical examination and preliminary microscopy results. Treatment should be administered while awaiting confirmatory results unless reattendance can be assured. The decision on when to treat is one of clinical judgement bearing in mind the balance between the urgency to treat STD and indiscriminate administration of therapy.

Compliance

Good compliance to prescribed treatment by the patient directly relates to a successful desired outcome. An important factor to interfere with compliance is complexity of treatment regimen — multiple drugs and frequent doses. The key is to use specific therapy and keep the regimen simple — single drug and once/twice daily doses. Side effects deter patients from being faithful to their medication. Pre-warning the patient of possible side effects and how to handle them is important. The patients should be told to return and report unpleasant side effects rather than stop treatment.

The basic premise to build on to ensure good compliance is good quality of doctor-patient relationship. The relationship should be truthful, non-judgemental, non evasive and positive. Ensuring compliance just like making an accurate diagnosis is the responsibility of the clinicians.

Return for Test of Cure

The medical profession is fully aware that the absence of symptoms or signs does not mean the elimination of the infectious agent. This concept of asymptomatic infection must be passed on to the patient. The patients must be told to return for reassessment by the doctor and where indicated, the appropriate test of cure should be done. The criteria of cure may be clinical, microscopic or serologic evaluations. Patients should be discharged or allowed to resume sexual activity only when the test of cure is negative.

Patients should be advised on abstinence from sexual activity until they are considered cured. If this is not possible the use of protective barriers (condoms) is extremely important.

Screen for Other Sexually Transmitted Diseases

Generally patients with one sexually transmitted disease belong to the high risk group for other sexually transmitted diseases. It would thus be prudent to screen these patients for other STDs.

For the male patients we would suggest at least a VDRL, urethral smear for urethritis and clinical examination for herpes genitalis and warts. Where indicated, a HTLV III Antibody test and Hepatitis Bs Antigen test should be carried out.

In women patients, a full screen includes a VDRL, microscopy on vaginal secretions for trichomoniasis, microscopy on smear from vaginal wall for candidiasis, smear and culture for gonorrhoea from the cervix and urethra and culture from the rectum. Where indicated, a test for Chlamydia is taken. A clinical examination for genital warts and herpes genitalis is indicated.

Management of Sex Contacts

As the STDs are infectious diseases, for each diagnosed patient, there is at least one untreated primary (source) contact and many secondary contacts. The patients must be counselled on the need for the sex partners to be treated so as to prevent reinfection of the patient, transmission to others and the possibility of developing complications if early treatment is instituted.

Chemoprophylaxis

The use of antibiotics as chemoprophylaxis before or after casual sexual contact is not to be encouraged. There is no single antibiotic to treat the several potential sexually transmitted diseases. Dose and timing of prophylactic antibiotics in sexually transmitted diseases have not been worked out. Increased use of antibiotics increases the incidence of adverse drug reactions. Finally indiscriminate use of antibiotics encourages development of antibiotic resistant organisms.

Epidemiologic Treatment

Epidemiologic treatment is administered prior to diagnosis in symptomatic or asymptomatic

regular contact of a patient with confirmed STD. The factors to consider before making a clinical judgement to administer epidemiologic treatment include:

1. the risk of infection
2. the risk of complications.
3. the severity of complications.
4. the risk of transmission.
5. the sensitivity, availability and cost of the diagnostic test.
6. the effectiveness of treatment.
7. the toxicity or side-effects of treatment.
8. the ability to ensure follow-up of patient.

In situations like in the regular female sex partners of a male patient with gonorrhoea, the risk of infection is high (up to 60% or more), the risk of complications is high (10% for PID), the severity of complications is costly (infertility, ophthalmia neonatorum), the sensitivity of diagnostic test is good (though not 100%) and the effectiveness of treatment is excellent (more than 98%). The side effects are minimal and if return for repeated testing and results are difficult, then epidemiologic therapy would be indicated.

Prevention Messages

Finally a dose of preventive messages are essential to prevent reinfection. Questions on safe sex, sexual hygiene, fertility and pregnancy should be covered before the patient is discharged from the clinic. Avoidance of high risk sexual behaviour and use of condoms and barrier contraceptive should be encouraged. Self medication should be discouraged.

In conclusion the management of sexually transmitted diseases allows the clinician to develop his medical, clinical and communicative skills with a high chance of a good outcome for the patient, the doctor and the community. The STD treatment guidelines is not a book of rules. No cook book methods can be developed to manage the STD. The STD treatment guidelines is a useful source of information and guidance. In the final analysis clinical discretion and judgement must be exercised with every therapeutic decision.

HOME STUDY SECTION

ECG QUIZ

by Dr Baldev Singh, MBBS (S'pore), M Med (Int Med), MRCP (UK)

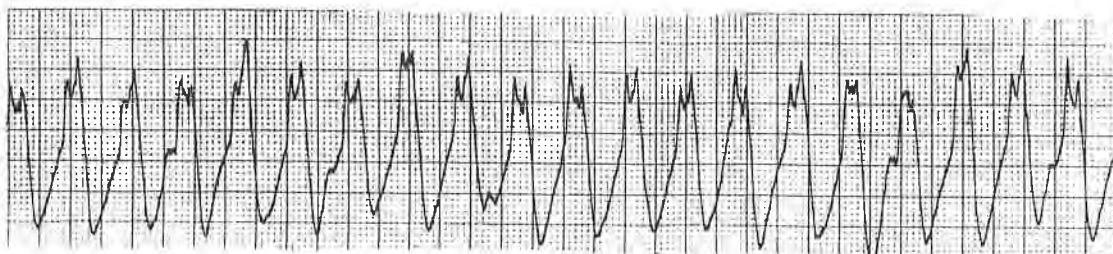
Study the following ECG rhythm strips, the first 3 of which were taken from a patient who was admitted with an acute myocardial infarction and pulmonary oedema.

1. What is the rhythm in each lead?
2. What are the current recommended guidelines for treating rhythm 2 and 4?

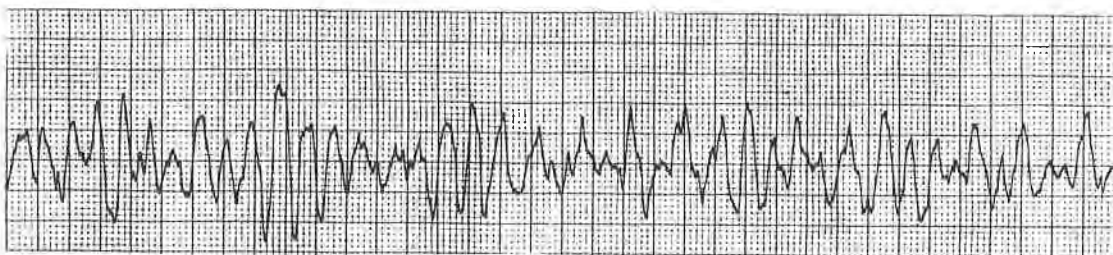
Rhythm Strip 1



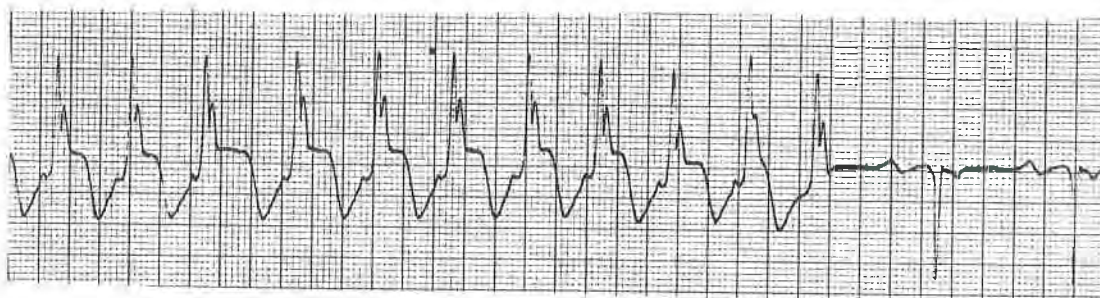
Rhythm Strip 2



Rhythm Strip 3



Rhythm Strip 4



HOME STUDY SECTION

X-RAY QUIZ



FIG 1

Fig 1 shows a Chest X-ray of a adult chinese male who was relatively asymptomatic

- 1) What abnormality can you see?
- 2) What other views would you suggest to further evaluate this lesion?
- 3) What is the possible diagnosis?

ANSWER TO ECG QUIZ

- Rhythm Strip 1:** Atrial flutter with variable A-V Block.
Rhythm Strip 2: Ventricular tachycardia.
Rhythm Strip 3: Ventricular fibrillation (preceded by a brief episode of Torsade de Pointes)
Rhythm Strip 4: Ventricular tachycardia (slow)

Treatment of Ventricular Tachycardia (Flow Chart A)

When VT is witnessed on the monitor scope one must quickly check the clinical status of the patient.

- a) Is the patient conscious?
- b) Is a pulse present?

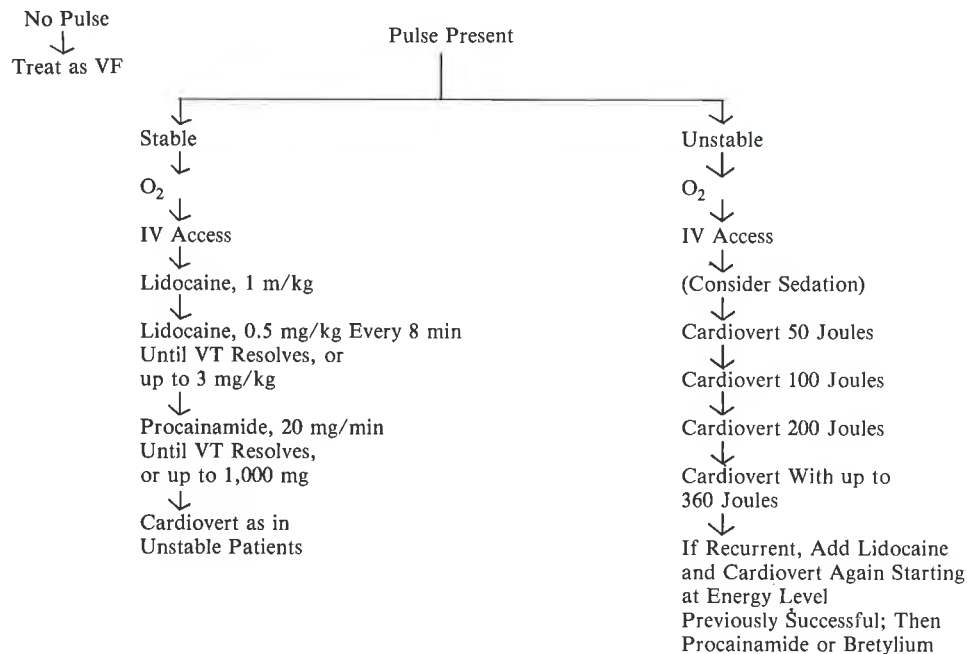
If the patient is unconscious and pulseless the treatment for VT is the same as for Ventricular fibrillation (discussed subsequently).

If the patient has a pulse, one must assess whether he is haemodynamically stable with a satisfactory BP or in shock. In the haemodynamically stable patient, the first approach is anti-arrhythmic drug therapy such as Lidocaine, (See Flow Chart A for sequence of steps). Mechanical means of conversion such as "chest thump" or asking patient to "cough" may be attempted but only if a backup defibrillator is available since such maneuvers may either convert the rhythm to sinus, have no effect or produce ventricular fibrillation. If such therapy is unsuccessful, low energy synchronised DC conversion may be necessary. If patient is awake and if time permits, sedation prior to conversion is recommended.

In the haemodynamically unstable patient, e.g. BP less than 90 systolic mm Hg, congestive cardiac failure, chest pain, etc, emergency unsynchronised countershock is recommended.

Once VT has resolved, begin IV infusion of anti-arrhythmic agent that has aided resolution of VT, e.g. IV Lidocaine 1 to 4 mg per min or IV Bretylium 2 mg per min.

Flow Chart A Treatment of Sustained Ventricular Tachycardia



If VT is refracting, newer anti-arrhythmic agents may be tried, e.g. IV Flecainide 2mg/kg (up to a max. of 150 mg) over 10 minutes or IV Amiodarone 5mg/kg (up to a max of 300 mg) over 5 minutes with close monitoring.

Both these medications can be administered by infusion and subsequently in tablet form, but one must be thoroughly familiar with their side effects and interaction with other drugs.

REFERENCE

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ANSWERS

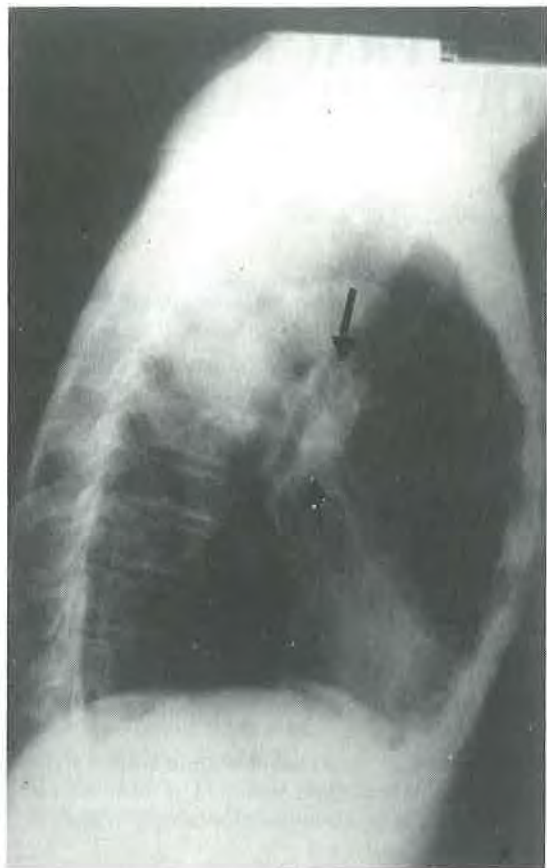


Fig 2 and fig 3 are the lateral view and tomograms of the same patient. There is a left hilar mass [arrows] which appears to envelope the left main bronchus and lower trachea and has probably infiltrated it.

DIAGNOSIS

Bronchogenic Carcinoma — Apical segment of the left lower lobe.

DISCUSSION

Bronchogenic carcinoma is one of the most common causes of unilateral hilar mass and could be first considered, particularly in the older age group. There are other causes of unilateral hilar mass which include Lymphoma, Metastasis, Tuberculosis and Sarcoidosis.

Lateral view and tomograms help to localise and delineate the features of the lesion. CT Scan may also be used in the later stages of evaluating mediastinal lesions.

Bilateral hilar lymphadenopathy, on the other hand is most commonly due to Lymphoma, Sarcoidosis, Metastasis and sometimes Tuberculosis.

FIG 2

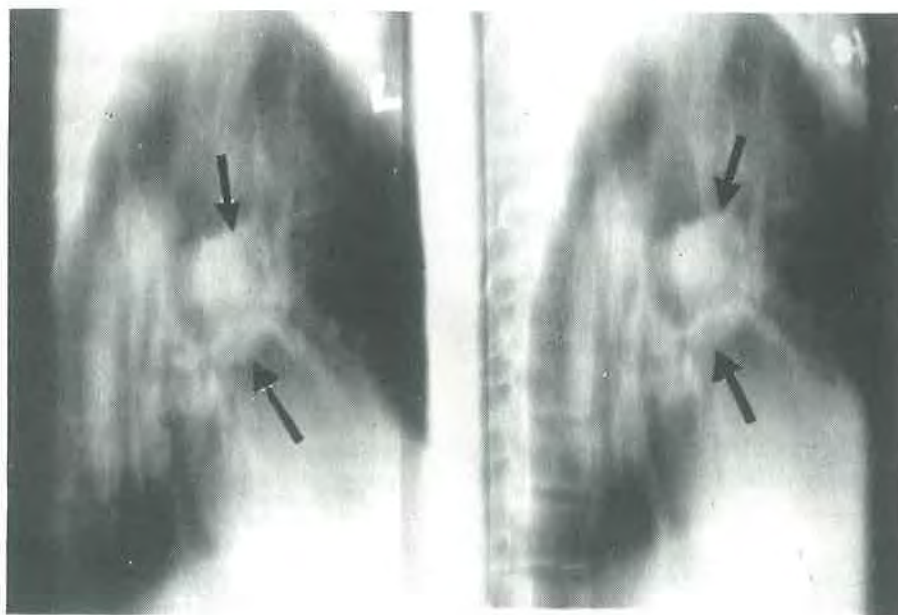


FIG 3

CASE STUDY IN GENERAL PRACTICE — HAND-FOOT-AND-MOUTH DISEASE

Dr Chan Cheow Ju

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INTRODUCTION

A case report of Hand-Foot-and-Mouth (HFM) disease is first presented. This is followed by a discussion on HFM disease, the differential diagnosis of fever and a rash in general practice, and basic descriptive epidemiology in general practice.

CASE REPORT

The patient is N.A.R., a 1-year old Malay girl. She was seen on 2.7.86 for a fever and running nose, and was treated for an upper respiratory tract infection. The next day, she was seen as she was refusing feeds.

Examination showed a low grade fever, and characteristic papules and ulcers on the soft palate, and papules and vesicles on the knees, right hand and buttocks. A diagnosis of hand-foot-mouth disease was made.

She was treated with paracetamol for fever and pain, Orased lotion for oral analgesia, and dimenhydrinate for sedation.

Her mother and babysitter were informed that the rash and mouth ulcers would be expected to last up to 4-5 days; during this period, she would understandably be irritable and refuse feeds. A diet with lots of cool fluids, avoiding hot drinks and hard solids, was advised.

DISCUSSION

Hand-foot-mouth (HFM) disease

HFM disease is an infectious disease caused by a Coxsackie virus. It has a characteristic

clinical picture, with papulo-vesicular lesions on the palms ('hand') and soles ('foot') and ulcerations in the mouth. In some cases, a more profuse papulo-vesicular rash may appear on the extensor surfaces of the knees, and on the buttocks. The profuse rash can mimic mild chicken-pox, but the presence of oral ulcerations and involvement of palms and soles in diagnostic chicken-pox spares the palm and soles.

At initial presentation, parents may only complain of fever and refusal to feed; the alert doctor must actively hunt for oral, palm and sole lesions which may not be reported.

HFM disease is a rather benign illness with minimal constitutional upset. The illness and lesions usually resolve spontaneously within 4 to 7 days.

The general practitioner can impress and bring much relief to the parents with a confident diagnosis and prognostication, and provide symptomatic therapy.

Fever and a Rash

The experienced general practitioner can usually make a fairly accurate diagnosis of an illness presenting with a fever and a rash, based on the history of the illness, a careful observation of the morphology and distribution of the rash, and associated physical findings. The main diagnostic features of the common febrile conditions associated with a rash seen locally are reviewed below.

Chickenpox

Since the skin lesions appear in crops, there is usually a multi-morphic appearance at the time of consultation with groups of papules, vesicles and in the late stages, scabs. The vesicular eruption is the most characteris-

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PROFILE OF 5 CASES OF HAND-FOOT-AND MOUTH DISEASE

No.	Reference	Sex/Age/Race	Presenting Complaints	Physical Findings	Remarks
1	14#12-294	F/12mths/Mal	fever, refusal to feed	fever, oral ulcers, papules + vesicles on hands, knees, buttocks	
2	18#04-170	M/24mths/Ch	fever, oral pain	fever, oral ulcers, papules + vesicles on hands	Brother had similar illness
3	43#14-638	M/23mths/Ch	fever, rashes	fever, oral ulcers, papules + vesicles on palms + soles	
4	21#14-62	F/2½ yrs/Mal	fever, mouth ulcers, rash	fever, oral ulcers, papules + vesicles on hands, feet, knees, buttocks	Cousin had similar illness
5	—	M/19mths/Ch	rashes	oral papules, papules + vesicles on soles, palms, elbow, knees, buttocks	

tic lesion; it is also very itchy. The rash is most profuse on the trunk, axilla and groin areas; lesions may also be scattered on the face and limbs, but spares the palms and soles.

Measles

Measles has a characteristic prodroma of fever, rhinitis and conjunctivitis, giving the 'measley' look. Koplik's spots, pin-point ulcers on an erythematous base on the buccal mucosa appearing on the 3rd or 4th day of the fever, are pathognomonic. The enanthem is an extensive characteristic patchy macular appearance (the 'morbilliform' rash) usually starting on the head and neck on the 4th or 5th day of the fever, and rapidly extending to the rest of the body. Post-measles staining persists for weeks to months.

Roseola Infantium

Roseola infantium or exanthema subitum is a common febrile illness of infancy. After a febrile period of 3 to 4 days, a papular rash appears, mainly on the trunk and proximal parts of the limbs, usually sparing the face. Unlike in measles, the child is usually quite well apart from the fever and rash, there are no Koplik's spots, and no post-measles staining.

Rubella

Rubella is uncommon in infancy. In childhood, it is usually a mild illness, with minimal fever or constitutional symptoms. The rash is maculo-papular, starts behind the ears and neck, spreads rapidly onto the face, then the trunk and limbs, and disappears rapidly in 1-2 days. Posterior cervical and occipital lymph nodes are always enlarged. These features

help to distinguish rubella from roseola infantium and drug rash, but where doubt still exist, and the situation is complicated by contact with and possible dangers to the pregnant women, confirmatory serological tests to show a 4-fold rise of antibody titre in paired sera would be necessary.

Drug Rash

Drug rash can take many forms; the extensive maculo-papular form comes into the differential diagnosis of febrile rashes. There must be a history of ingestion of medication, antibiotics being the most commonly implicated, and the rash is usually itchy. The rash may be transient, or more commonly, lasts several days to a week.

Dengue Haemorrhagic Fever

After a 3-4 day period of fever, a generalised flush appears; characteristically, there are pale islets of sparing. Petechiae would be present, or may be elicited with Hess' test in cases with moderate or severe thrombocytopenia.

Infectious Mononucleosis Syndrome (IMS)

In IMS, besides a prolonged fever and a rash, there is a tonsillar exudate forming a pseudo-membrane, generalised lymphadenopathy especially marked in the cervical area, and hepato-splenomegaly. The appearance of the rash often follows soon after ampicillin ingestion.

Descriptive epidemiology in general practice: a collection of five cases of HFM disease

The general practitioner is usually the first

doctor to get the first whiffs of an outbreak of infectious diseases like influenza, measles and mumps. HFM disease itself was first described in Singapore in 1974, based on a collection of cases seen by a group of general practitioners in 1973.

For a start, the general practitioner can make simple epidemiological observations by keeping a record of names and references of the cases of an illness he has seen; subsequently, he can examine the case records at leisure.

In this manner, the author collected basic data on 5 cases of HFM disease over a 3 week period. The profile of the 5 cases is presented, and compared with the 1972/73 island-wide study.

HFM DISEASE: A COMPARISON WITH THE SINGAPORE ISLAND WIDE STUDY OF 1972/73

	Singapore 1972/73	Author's Collection
Total no. of cases	104	5
Period of study	3½ months Sept '72 — Jan '73	3 weeks June-July '86
Patients under age 5 years	80%	100%
Sex		
Males	53%	60%
Females	47%	40%
Race		
Chinese	91%	60%
Malays	7%	40%
Indians	2%	
Clinical features		
Oral lesions	100%	100%
Exanthem	90%	100%
Fever	89%	80%

The five cases presented represent too small a number for statistical analysis; in any case, HFM disease is already well described; nevertheless it is based on basic data collection such as this one, that answers can be found to the basic questions of descriptive epidemiology of who, what, where and when:

- WHO gets the disease: all the five cases involved toddlers aged 1-2½ years old.
- WHAT are the features of the disease: presenting complaints were fever (4 out of 5 cases), rashes (3/5), oral pain (2/5) and mouth ulcers (1/5). On examination, all 5 cases had evidence of the characteristic papulo-vesicular eruption on the hands and feet, and the accompanying oral eruption of papules, vesicles or ulcers.
- WHERE: 4 out of 5 cases were residents of Telok Blangah housing estate.
- WHEN: the 5 cases occurred during a 3-week period from 15.6.86 to 2.7.86. This includes the Hari Raya Puasa Season, when there is the prospect of increased interaction among the Malay toddlers.

Thus, the general practitioner can make a start in contributing towards descriptive epidemiology with basic data collection based on clinical observations, like the simple exercise carried out above.

REFERENCES

1. Tay C. H. et al: Outbreak of Hand-Foot-and-Mouth Disease in Singapore, Singapore Medical Journal, Vol. 15 No 3, 1974.
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3. John Rendle Short: A Synopsis of Children's Diseases, John Wright & Sons Ltd, 1985.

NEWS FROM THE COUNCIL

1. OFFICIAL OPENING OF THE NEW COLLEGE PREMISES

The College premises were officially opened by Mr Howe Yoon Chong, former Minister for Health on Saturday 15 August 1987. The College Convocation and the Tenth Sreenivasan Oration were held in line with the opening.

2. ANNUAL GENERAL MEETING

The College of General Practitioners Singapore held its 16th Annual General Meeting on Sunday 2 August 1987. The new office bearers for the 11th Council 1987-89 elected were:

President	Dr Lee Suan Yew
Vice President	Dr Koh Eng Kheng
Censor-in-Chief	Dr Lim Kim Leong
Hon Secretary	Dr Soh Cheow Beng
Hon Treasurer	Dr Alfred W T Loh
Council Members	Dr Chan Cheow Ju
	Dr Paul Chan Swee Mong
	Dr Cheong Pak Yean
	Dr Henry Yeo Peng Hock
	Dr Yeo Siam Yam

3. CONTINUING MEDICAL EDUCATION

The Continuing Medical Education Committee conducted an General and Orthopaedic Surgery Course in July/September 1987. The programme included the following:

GENERAL SURGERY

Date	Topic	Lecturer	Moderator
10.7.87	Breast Cancer — Screening and Management	Prof R Nambiar	Dr Henry Goh
17.7.87	Renal Calculi and Transurethral surgery	Prof K T Foo	Dr Goh Lee Gan
24.7.87	Minor General Surgery	Mr Lee Yee Chun	Dr Alfred Loh
31.7.87	Colorectal cancer — Screening	Mr Goh Hak Su	Dr Soh Cheow Beng

ORTHOPAEDIC SURGERY

04.9.87	Evaluation & Management of of Knee Pain	Mr Tan Ser Kiat	Dr Cheong Pak Yean
18.9.7	Update on Burns Management	Mr Lee Seng Teik	Dr Hia Kwee Yang
25.9.87	Plastic and Reconstructive surgery	Mr Lee Seng Teik	Dr Moti Vaswani

4) NEW MEMBERS

The following new members have been accepted by Council into the membership of the College during the months of April/September 1987:

Dr Margaret Ng	— Ordinary Membership
Dr Vivien Chong Ee Mei	— Associate Membership
Dr Lee Hock Seng	— Associate Membership
Dr Ng May Mei	— Associate Membership
Dr Vengadasalam, D	— Associate Membership
Dr Lily Aw Lee Fhoon	— Associate Membership
Dr How Chong Hong	— Associate Membership
Dr Yong Chee Fah	— Associate Membership
Dr Ong Meng Yi	— Ordinary Membership
Dr Yang Hong Ping	— Ordinary Membership
Dr Chen Ai Ju	— Ordinary Membership
Dr Goh Ching Luck, Peter	— Associate Membership
Dr Lim Yew Cher, Alex	— Associate Membership
Dr Adelia Low	— Associate Membership
Dr Ng Lee Beng	— Associate Membership
Dr Tan Bee Lee, Philip	— Associate Membership
Dr Tan Bee Tin, Grace	— Associate Membership
Dr Tan Lean Beng	— Associate Membership
Dr Chua Sui Meng	— Ordinary Membership
Dr Chui Chow Yin	— Associate Membership
Dr Chaim Heng Tin	— Ordinary Membership
Dr Wong Fook Poh	— Ordinary Membership
Dr Cheong Wei Ling	— Associate Membership
Dr Choong Siew Foong	— Associate Membership
Dr Heng Kuo Leng, John	— Associate Membership
Dr Ho Sook Yean, Theresa	— Associate Membership
Dr Tan Len Khim	— Associate Membership
Dr Murugesu Jayaraman	— Ordinary Membership

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