Chronic Obstructive Airway Disease: Taking your Breath Away!

An interview with Dr Tan Tze Lee

The New Paper (NP) on-line of 14 November 2016 reported the story of a Chronic Obstructive Lung Disease (COPD) patient 64-year-old Mr Hanafi Mohd Noor (ex-smoker, smoked for 37 years) with the headline 'Medicine helps him breathe better'. Dr Tan Tze Lee (TZL) gave the expert commentary of Hanafi's illness in the NP report and also commented on the state of COPD in Singapore as the president of the COPD Association of Singapore. The College Mirror caught up with Dr Tan for further clinical pearls on the subject.

CM:
NP quoted you as saying that 'In Singapore, there are almost 88,000 people who suffer from COPD'. Family doctors are not seeing many cases of COPD. Do you think there is under-diagnosis? Or are the COPD cases mainly seeing specialist clinics in hospital?

RT:
Both are unfortunately true. I do believe that there is under-diagnosis of COPD in Singapore. It is the 7th most common condition for hospitalisation in Singapore in 2011, Many of these patients have already the severe form of the disease. These patients subsequently get followed up in the specialist outpatient clinics.

The cases are out there, we just need to look out for them and diagnose them early.

CM:
In the NP report, you mentioned that COPD may sometimes be confused with Bronchial Asthma. Can you provide some tips of how to spot it and also if there are overlapped syndromes?

RT:
COPD differs from asthma in various aspects. COPD patients are generally older, have a history of smoking over 10 years in most cases like Hanafi, little history of allergies, lots of sputum production. Their symptoms are also persistent and progressive. Asthma on the other hand usually starts at a younger age. Patients tend to have a history of allergies like atopy, the symptoms are intermittent and variable, and are usually not progressive. Spirometry in COPD patients do not normalise, whereas in asthma they do.

There are some patients who are said to have Asthma COPD Overlap Syndrome, ACOS, but this remains rather controversial.

More often than not, patients with COPD are misdiagnosed with bronchial asthma, and suboptimally treated. With earlier diagnosis, more appropriate interventions could be instituted much earlier, resulting in better outcomes.

CM:
The gold standard of diagnosis is spirometry. Many family doctors do not own the device. Can you provide some practical advice of how to get this done and its reliability and interpretation?

RT:
Spirometry is an easy examination to perform. The machine is now less expensive than before and after simple training, most family physicians will be able to do this in their clinics. The cost of a PC spirometer can range from anywhere from $3000.00 to $4000.00. For private clinics, there are tax incentives for acquiring such devices which help in overall productivity, diagnosis and care delivery. I have conducted several spirometry workshops for family doctors. The participants all found it very useful, and were most enthusiastic to start performing these tests. In these hands on sessions, what was very surprising for many of the participating doctors were their own spirometry readings. One participant had pulmonary tuberculosis in his youth and his pattern was restrictive. Another was a known asthmatic, but on testing himself he was shocked that he could only achieve an FEV1 of only 59% despite being on regular combination inhalers!

Of course, it is still possible to request for spirometry testing at restructured hospitals and polyclinics, where the costs per test range from $40 to $70.00. However, I strongly believe that family physicians and GPs are more than capable of performing spirometry testing themselves. It will be more impactful, and is not only a diagnostic tool but can act as a therapeutic tool in smoking cessation.

CM:
NP reported that Hanafi said he is now on three types of medicine-Nasonex, Relvar Ellipta and Spiriva. Most family clinics do not stock the last 2. Can you give us an idea of the efficacy and cost?

RT:
Relvar is a LABA/ICS (Long Acting beta antagonist/Inhaled Corticosteroid) combination inhaler. They are recently available. A study recently concluded, the SALFORD study has shown that it reduces exacerbations by 8.4% in COPD patients. Spiriva is a LAMA (long acting muscarinic antagonist) inhaler and it too has been shown to reduce exacerbations in multiple studies.

Yes they are still relatively expensive. The pharmacy price of Relvar/Ellipta is around $75.00, whereas spiriva respimat is around $105.00 each. A patient like Hanafi would need to spend $180.00 a month. Government subsidies are claimable under CHAS and Pioneer Generation and patients can use their CPF up to $400 a year.

CM:
You recently were in the expert panel together with A/Prof Khoo See Meng, senior chest physician NUH in the grand ward round conducted by the NUH FM residency programme on 7 Oct 2016 aptly titled 'Taking your breath away'. What do you think are the important take-home messages? How can these messages be spread to the wider FM fraternity?

RT:
The take-home message for family physicians is that they are more than equipped to diagnose and manage COPD cases in the community. Patients with COPD come in all shapes and sizes, male and female alike. We often have the misconception that it only affects older men, when in fact with more women and young people smoking, the demographics are changing. Women smokers are thought to be more susceptable to COPD, and we are beginning to see more women smokers who present with irreversible airway obstruction.

As smoking remains the primary factor for COPD in our local context, knowledge about our patient smoking habits and focus on smoking cessation should be more widely practiced. Although traditional teaching is that once COPD sets in, the airway obstruction is permanent, what we often see is that smokers who stop smoking can, in fact, see an improvement of their lung function upon smoking cessation. It is of utmost importance that we try our level best to encourage our patients to quit! We can do it in our own clinical settings. Otherwise smokers can also be referred to cessation programmes conducted by Health Promotion Board and the restructured hospitals.

CM:
We learnt from the article that you are presently the president of the COPD association How did you get involved and what does the COPD association do?

RT:
I have been involved with the COPD Association Singapore (COPDAS) since 2008. Being an asthmatic myself, I have always had a special interest in respiratory disease, and when my dear friend and colleague Dr Ong Kian Chung, the then president of COPDAS, asked me to join and lend a hand, I jumped at the opportunity and have been involved ever since.

As an association, we have been mainly involved in public awareness and education about COPD. In 2009, we conducted an island wide COPD awareness campaign that greatly raised the public knowledge of COPD. We also conducted many continuing medical education sessions for our GP colleagues through the years including spirometry workshops.

CM:
As for tobacco smoking and second hand smoke as causation, what measures do you think can be further taken and the family doctors roles in this?

RT:
With the anti-smoking restrictions that are now in place in Singapore, we have been able to curb the exposure to cigarette smoke. The Health Promotion Board has already in place many programmes to help our smokers to stop smoking. Can we do more? Indeed we can! During a recent visit to Australia, I was surprised to see so few smokers around. I discovered that cigarettes were not displayed in the open for sale, and the costs were prohibitive, several times the cost in Singapore!

If we doctors made it a point to take an active interest in a patient's smoking history, just the mere show of concern to the patient about his or her smoking habits will go a long way to reducing smoking rates. As family doctors we are ideally placed to support our patients through the smoking cessation ordeal, and we certainly can make a difference!

CM:
And lastly, we also know that you are the vice-president of the College, hold teaching appointments in our medical schools and if it were by the way, run a busy group practice in Choa Chu Kang. How do you manage to juggle your time to do all these? Do you have a family life at all?

RT:
Ha ha! That is a good question.

I teach at both the Duke-NUS Graduate Medical School and the NUS YLL School of Medicine. I have served in the college since 2009 in different capacities and currently, as Vice President of the college. All these additional duties do put constraints on my personal time, especially as I am still working full time in a family practice in Choa Chu Kang. I started this practice with my wife Dr Kee Loo 25 years ago after leaving NUH as a senior medical resident, and have never regretted making the change from hospital medicine to working in primary care.

I am blessed to be able to work with my wife, Dr Kee Loo, who is a great pillar of strength both in our practice and in our family. Without her support and encouragement, I certainly would not have been able to do all that I have committed myself to. My wife and other colleagues in the clinic have all pitched in and contributed enormously to run the practice time and again, freeing me to fulfill my other equally important commitments. We have two sons and a daughter who are all studying overseas. We make it a point to visit them as much as we can!

CM