

CONFERENCE REPORT by Prof. Roger K.A. Allen (8.9.10).

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THANKS

I wish to thank the Queensland Asbestos Related Disease Support Society Inc. for their generous financial support in assisting me to attend this international conference in Montreal. I wish to add that the hundreds of hours of work I did for this project was done *pro bono* and for those of us in private medical practice, the cost of taking time away from work is considerable as our running costs continue undiminished. I appreciated being able to use the Business Class lounge particularly when my flight was delayed in Vancouver for six hours due to engine trouble and to be able to sleep lying down when I boarded the plane home at 4am Montreal time.

On my return yesterday, I was saddened to read of the death of Mr. Christopher John Smith in your newsletter as I gave expert evidence in his landmark case in Melbourne a few years ago. Whenever I came across him in the wards at the Wesley, Chris was always smiling and exuded a sense of stoical optimism.

THE IASP

As one who has only recently been admitted as a member of the International Association for the Study of Pain (IASP), this was the first time I had attended one of their meetings which was huge by Australian standards, with several thousand delegates from all over the world. I have found that meetings which are a little outside my direct line of work i.e. thoracic and sleep medicine, are more rewarding as these areas have both novelty and present different clinical approaches. It is like the plumber attending an electricians' conference. Although both work on the same house, each tradesman sees the house from a different perspective. Novelty also invokes more reflection and induces a fresh approach to what may be often seen as mundane and repetitive. I have found that this time away from a busy medical practice also allowed time for a revitalisation, new ideas and renewed energy for research.

RESEARCH

With regards research in general, there is a tendency by the lay public to give it a somewhat mystical aura worthy of great hushed respect. To me it is purely a matter of curiosity; of asking a question about something unknown and applying energy and reason to find an answer or a better way of doing something. As I flew home on a non-stop flight from Vancouver to Sydney across the vastness of the Pacific Ocean, I thought of Sir Charles Kingsford-Smith who was, to my way of thinking, a pioneer of aviation research although by convention we tend to call this "exploration". It was in 1927 that my father as a young boy saw Smithy land at Eagle Farm. We now take such a trip for granted as we do with advances of medical research with its forgotten heroes of its discoveries. Who can name the discoverers of the link between asbestos and mesothelioma, or who thought of the idea of MRI or the CT scan let

alone mundane drugs such as Panadol (paracetamol) and Normison (temazepam)? We know far more about the heroes and anti-heroes of sport and politics.

CHEST PAIN IN ASBESTOS DISEASES

For some time now I have been looking at the question of chest pain which I and others believe is caused by benign asbestos diseases i.e. pleural plaques, pleural thickening, folded atelectasis and asbestosis. At this meeting, I was privileged to present the results of our findings on this subject and was the only paper out of 2,000 on this. The poster was entitled, *Chest pain in 282 patients with benign asbestos disease*, with my co-authors Professor Tess Cramond and Ms Deborah Lennon of the Wesley Research Institute, neither of whom were able to attend. This was well received by those who discussed the findings with me and with not one dissenting voice. Indeed, many who had no experience with this condition thought it surprising that not everyone suffered from pain. During my poster session I met several Canadians who were very apologetic about Quebec's still mining white asbestos in the hundreds of thousands of tons a year. Most of it was being exported to India where it is used in the building industry. The unvetted forces of capitalism seem too strong to lead to its prohibition and even the Canadian medical and thoracic societies seem either powerless to stop it or are defensive of this practice. I once sent a letter to the Canadian Thoracic Society about this and had no reply.

In the study we took a random sample of the initial presenting data of patients I had seen over the previous ten years and divided them into those referred for medicolegal assessments and those referred by their general practitioners with the two groups roughly equally divided. We later excluded those with mesothelioma. The results showed that these were mainly blue collar workers aged in their mid 60's, many of whom were ex-smokers. They were not a very healthy group as a whole as they suffered from a wide range of medical conditions including cardiovascular disease, diabetes and sleep apnoea. Care had been taken to exclude angina as the cause of chest pain and I had no input into the way the patients were chosen or into the data collection. The medicolegal patients had as a rule more severe disease and we found a strong correlation between those with folded atelectasis and chest pain. Pleural thickening was also strongly associated with chest pain. It is not surprising that an infolding of the pleura (folded atelectasis) would lead to chest pain. However, there was no increase in chest pain in the litigants compared with the GP group which indeed had more pain. A possible explanation is that the GP group had presented for investigation because they had symptoms e.g. chest pain.

This is the only clinical paper of this kind so far in the literature and is in close agreement with the findings of a study published in 2000 based on a questionnaire sent out to over 1,200 people who had been associated with the Wittenoom mine site. They found over 40% had chest pain but there was no clinical examination of the patient or any clinical information such as CT information which was available in our study. However, where there is smoke there is fire and I feel our study adds one more piece of evidence to the jigsaw puzzle and will help validate the pain suffered by so many people.

I have submitted the full paper which has much more detail to an international pain journal and wait to see if it is accepted. If not I will not be deterred. I suspect that defendants' lawyers will try to "sink" or

discredit this paper and no doubt scrutinise what I am writing now but regardless, for the past ten years, on a daily basis, I have seen patients with this chest pain and the rate remained constant over this period. It came as a surprise that patients had put up with the pain for so long; an average of 4.8 years and as long as 20 years and in most case no doctor had been able to give an explanation. There had been no closure on the pain which tends to make pain even more difficult to bear. If doctors are ignorant of the condition, there is a tendency not to ask the patient about it, or worse still dismiss it as either imaginary or due to something else e.g. a hiatus hernia or back problems. But as Abraham Lincoln once said, *"You can't fool all the people all of the time"* and such it is in my opinion with this type of chest pain. If this is a real entity, as we think it is, further studies conducted with good will and an open mind, will confirm our findings and that of the West Australian study. This in turn will eventually lead to more cost-effective treatment, more empathy and better outcomes. We are currently working on a paper showing treatment algorithms for doctors. We may even develop better ways of diagnosing it as at present it is a diagnosis made only after thorough exclusion of other causes of chest pain.

THE CONFERENCE

The meeting started on a Sunday with a refresher session which went from 8am until 8pm on pain from A to Z and was accompanied by a 450 page book which covered the subject matter. It was a long day. The following four days were packed with concurrent lectures and each day there were over 450 posters, a large number of which were to do with the assessment of pain, psychology and some on how ways to image pain. Persistent pain leads to permanent changes in the cerebral cortex (the outside layer of the brain we call the grey matter). Studies there showed elegant ways of mapping the brain by use of MRI and PET scanning (positron emission tomography). However, out of all the posters, ours was the only one on asbestos diseases and the only other ones on chest pain were on chest pain after surgery.

NEWER WAYS OF TREATING PAIN

Other things I gained from the meeting were newer ways to treat pain including the use of patches on the skin applying capsaicin which is the irritating substance found in chillies which makes it taste hot. These patches had an effect lasting weeks and reminded me of my father's accounts of mustard plasters on the chest for pleurisy when he was a child. How we return to old remedies. The other method was the use of local anaesthetic patches which was used for chest pain. These methods reduced the need for strong analgesics such as opioids (narcotic related drugs like morphine, oxycodone and codeine).

SIDE-EFFECTS OF OPIOIDS

With regards the use of opioids in high doses long-term, there was an interesting session on how these can lead to significant side-effects such as feminisation in men. They have a wide range of actions on the nervous system including in the brain and thus affect the hormonal system in the pituitary gland and hypothalamus. In the days of the opium trade in the nineteenth century, the British had observed in the Far East as they called it, men who smoked opium became lethargic, infertile and took on feminine characteristics. The British thought it was a good form of birth control for the oriental masses. However,

I have been told that the Norspan (buprenorphine) patches which are used widely for asbestos-related chest pain does not appear to cause this. Perhaps the dose is not high enough.

PAIN PERCEPTION

The perception of pain is quite variable and is gender-specific (women feel pain more) and has a genetic basis. There are even some rare genetic disorders where the affected person is incapable of feeling pain at all. Trance like states as one sees in India can reduce the feeling of pain as the central nervous system has inhibitory pain system which damps down our perception of pain. This may explain how soldiers in battle have felt no pain when losing an arm but later complained about an injection. Interesting studies in mice are casting new light on the complex range of genes responsible for the perception of pain. The more they look, the more complicated it becomes. Things which also reduce or mollify pain include a compassionate touch, empathy and even music (depending on the sufferer's taste).

Pain is felt more in people who are depressed and anxious and in those who tend to catastrophise i.e. see things as worse than they really are. With the same pain stimulus e.g. a pin prick, not everyone feels the same amount of pain and some won't feel much at all. In remember in the movie, Lawrence of Arabia, he could slowly put out burning match with his thumb and index finger without wincing. The treatment of the patient's depressed mental state goes some way to alleviating pain. However, from my own experience of over twenty or so years in this area, the stress of a medicolegal setting with its adversarial paradigm is hardly a conducive environment for the treatment of pain. The natural history of asbestos diseases, by and large is one of insidious progression with the pain often worsening which in itself is a depressing thought for someone with pain. At the risk of stating the obvious, pain like love, cannot be seen and is thus easy to discount. It is impossible to prove someone is in pain unless we do fancy tests of brain imaging or secret video surveillance and even then a scream can be feigned. This presents a difficult legal problem; the just compensation of pain. Similarly, depression cannot be seen either; only the physical effects. Pain has strong psychological component as we see in what we experience sometimes as the unbearable pain of loss, homesickness and bereavement and this in itself can make the perception of co-existing somatic (bodily) pain all the more intolerable.

CANADA AND OUR COMMON HERITAGE

As I had not been to Canada before, I found the experience rewarding and the Canadians very easy to get on with as they think more like us than people from those below the 47th (this parallel separates Canada from the United States). The Canada was first opened up to the Europeans by the Frenchman, Jacques Cartier in 1534. Quebec is the largest province in Canada and is bigger than Spain, France and Norway put together and French is spoken by 90% of Quebecois (the people of Quebec). Where ever I went, I was frequently complimented on my French which they said was unusual in Australians. As this is a francophone province, I never first addressed anyone in English out of respect.

Montreal which has 3.5 million people was founded in 1641 after the hill there they called Mont Royal and initially was a Roman Catholic mission in the midst of the Iroquois people who fought the French for many years. The city is strategically located on large island in the middle of the St. Lawrence River which

is one of the largest bodies of fresh water in the world being 35 km wide at its mouth. Quebec City which is 250 km down stream was chosen because this is where the river is at its narrowest, and was first founded in 1608 by the Frenchman, Samuel de Champlain. However, during the Seven Years War, it was captured by the British in 1759 under General Wolfe whose troops stormed the heights of Quebec City and also from the rear by the plateau behind called the Plains of Abraham. James Cook was Wolfe's navigator and later charted the St Lawrence so well he was asked to chart the east coast of New Holland. The French general opposing Wolfe was Montcalm whose third-in-command was the famous scientist, Bougainville, the only Frenchman at the time to be admitted to the Royal Society. Although both generals were killed in the battle, Cook and Bougainville were destined to leave their indelible mark by exploring the South Seas. Canada changed forever but their French heritage remains an integral part of their culture. When I visited the picturesque port of Victoria on Vancouver Island there was a statue there to Captain James Cook who had charted their west coast on his third and fatal voyage in the HMS Resolution and Discovery (1776-80). Cook was killed in Hawaii on St Valentine's Day, 1779 having charted the coast of Alaska, the Bering Sea and the east Russian Coast. His midshipman was George Vancouver who later returned for more exploration.

AUTOCHTONES AND ASBESTOS

The indigenous peoples we call the Red Indians, were called by the French, *autochtones*, (Greek *autos* self, and *chthon* meaning Earth) which comes from the Greek myth about infants who were born spontaneously from the Earth without the procreation of human parents. Like our own *autochtones*, for thousands of years, these people lived in harmony with Earth whom they regarded as their mother. They did not see themselves as the dominant species but amongst all the other animals. In 1854, the famous Red Indian, Chief Seattle, said, "The Earth does not belong to humans. It is we who belong to the Earth." In Genesis, God tells man to have dominion over the Earth, but this invokes the need to be a wise and caring husbandman, not a tyrant.

Lamentably, modern man has lost this vital notion and has exploited Earth to his detriment; the degradation of once pristine land, the loss of fish stocks, the ongoing extinction of species with even the loss of bees in the USA and now, global warming - all symptoms of this philosophical imbalance with Nature. It may yet destroy us. Like spoilt children we have an insatiable quest for the emptiness of "stuff" as well perpetual economic growth which is untenable in a finite and delicately balanced system. Each day we read in the newspapers and see on television, the effects of deep sea drilling of oil and gas, the effect on aquifers of the extraction of gas by burning coal underground, the degradation of the land by mining with its noxious by-products of heavy metals and cyanide and our modern practice of converting vast tracts of complex habitats to a monoculture dominated by large seed and chemical companies. Although we cannot see it, the glacier is moving and melting at that. The goose is laying golden eggs, but at what cost; this modern utilitarian attitude to the Earth. Man's short-sighted use of asbestos despite repeated medical warnings is just one small example of the malaise we have inflicted on ourselves and even the now it is being exported by several countries to innocent people who know nothing of its perils. It is with this perspective and with my greater appreciation of the complexity of this thing we call pain that I thank you for your generous support.

REFERENCE

1. Allen RKA, Cramond T, Lennon D. Chest pain in 282 patients with benign asbestos disease. Abstract. Proceedings of the 13th World Congress on Pain, IASP, Montreal. PW036.