

24 August 2011

Dear

Re: CHEST PAIN IN BENIGN ASBESTOS PLEURAL DISEASE

BY PROFESSOR ROGER K A ALLEN, THE WESLEY MEDICAL CENTRE,
AUCHENFLOWER

For many years thoracic physicians in Queensland have seen patients with asbestos pleural disease who have complained of chest pain. However, the literature has been sparse in its description of this condition until quite recently. In the early 1990s, a Western Australian group did a survey of patients with asbestos diseases asking in particular about chest pain. This was purely a questionnaire and the patients were not examined nor did they have CT scans or any other investigations. However, the authors concluded that about 40% of patients had chest pain, some of which they thought might be due to angina. There also were some sporadic case reports of chest pain in patients with asbestos pleural disease but no systematic approach to this condition.

However, in 2007 with a grant from Slater & Gordon, the Asbestos Research Group at The Wesley Research Institute set about studying this condition by looking at the charts of a large cohort of patients who had seen me over the preceding decade or so. I had gone to considerable trouble to exclude other causes of chest pain, which may confound any such study. These other causes of chest pain include angina, hiatus hernia, spinal pain from degenerative disease in the thoracic spine and musculoskeletal pain to name but a few. This diagnosis therefore remained a diagnosis of exclusion after rigorous investigations.

A confounding factor in any such study is observer bias, ie whether I was biased towards diagnosing this condition in asbestos patients, realising that this would be a reasonable source of criticism in a peer review journal. For this reason I decided to split the patients into two groups, ie those who were referred by lawyers for medicolegal reports and those who were referred by general practitioners for further investigation of asbestos disease asbestosis. I decided to use only my patients, many of whom were later seen by Professor Tess Cramond for assessment of their chest pain. I decided to use only my patients as I could vouch for the investigations done to exclude other causes of chest pain rather than involving other physicians, who may have been less rigorous in this approach. However, this in itself was both a strength and a weakness of the study.

We initially chose all patients with asbestos disease, including mesothelioma, as we also wished to see if mesothelioma was presenting with chest pain. Indeed in the majority of cases it presented as a pleural effusion causing breathlessness. After the selection of patients was completed, we excluded those with mesothelioma to avoid this diagnosis confounding the final results, as we wished to examine those with benign asbestos

disease and not malignancy.

The study showed some surprising results. We found chest pain was more common in the GP-referred group than those having medicolegal reports, indicating that this condition was not just that of potentially "malingering" litigants seeking redress through the court system. The patients were predominantly middle-aged male blue collar workers and we found no significant change in the proportion of patients with asbestos pleural pain over the 10-year period recorded. This indicated a significant element of internal consistency. There was a high proportion in those with diffuse pleural thickening and folded atelectasis and approximately 70% of those with folded atelectasis had chest pain, which is not surprising as this condition is a result of the pleura infolding on itself and as the pleura is pain sensitive, we believe this explains why the pain is so common in this group. We also found an increased incidence of asbestosis and more severe disease in general in the medicolegal group and this did not come as a great surprise.

The causation of the pain is open to debate but we believe that the pleural thickening due to pleural plaques, diffuse pleural thickening and folded atelectasis irritates the underlying intercostal nerves which run around the chest wall. This may explain why the chest pain is most common in the posterior chest wall not far from the vertebral column or alternatively in the anterior chest wall, as this is where the intercostal nerves lie unprotected from the underlying intercostal muscles. The pain is usually of dull, aching quality often with sharp exacerbations and is poorly responsive usually to simple analgesics such as Panadol but more responsive to drugs such as Lyrica (pregabalin) and gabapentin, which are drugs used for neuropathic pain of whatever cause. The severity of the pain varies considerably from patient to patient with some patients having no pain at all and others having intractable pain which has a significant impact on their quality of life. In addition, drugs such as Lyrica and gabapentin can cause weight gain and other drugs such as long-acting opioid patches, eg buprenorphine (Norspan) also may cause tiredness and lack of energy. Some patients become very depressed and anxious about this condition and require counselling, psychiatric care and often antidepressants.

There are numerous things we still do not know about the pain, which is confounded by the need for rigorous investigation to exclude other causes. We do not know why this occurs in some patients than others and why it can occur in some patients with fairly minor asbestos pleural disease and others who have severe asbestos disease may have no pain at all. We also do not have a clear idea about why it is more severe in others and we have a limited ability to assess the prognosis of asbestos pleural pain in any one patient.

The correct diagnosis of this condition could lead to a significant reduction in unnecessary investigations, eg coronary angiography and endoscopy when the managing physician has a clear idea of this pain entity and how to recognise it.

Research into this area is clearly needed and this can only come from philanthropic donations and dedicated research teams.

Our paper on asbestos pleural disease will be published in the international journal of pain called "Pain Medicine" in September 2011.

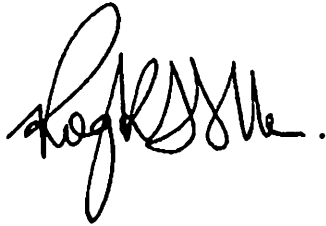
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Dr. Roger K. A. Allen
DOS: 24 August 2011

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CHEST PAIN IN BENIGN ASBESTOS
PLEURAL DISEASE
DOB:

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Roger K. A. Allen', with a period at the end. The signature is written in a cursive, somewhat stylized font.

Prof. Roger K. A. Allen
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This is a clinical letter and not intended as a medical-legal report. This letter is not to be released to a third party without the author's prior permission.