LETTER

Artificial stone-associated silicosis in the UK

We read with interest the recent article by Hoy *et al* highlighting the risk of accelerated silicosis in workers installing kitchen and bathroom worktops.¹ The Australian paper noted that artificial stone had been available in Australia since the early 2000s, and identified seven cases of silicosis diagnosed between 2011 and 2016. We were particularly interested by this, as the same type of artificial stone worktops have also been commercially available in the UK for approximately the same time period, yet there have been no published cases of accelerated silicosis from our country.

To investigate further, we interrogated the Surveillance of Work-related Occupational Respiratory Disease (SWORD) national reporting scheme database and reviewed the 161 reported cases of silicosis between 2000 and 2017.2 Interestingly, two-thirds of these cases were diagnosed in working age individuals. A review of each individual suspected cause confirmed that there have not been any cases attributed to 'artificial stone', 'artificial quartz', 'engineered stone', 'agglomerate stone', 'quartz conglomerate', 'Caesarstone', 'Silestone', 'Zodiaq' or 'resin'. In addition, there have been no cases where the occupation listed has made any reference to 'kitchen', 'bathroom', 'counter-top' or 'worktop'.

As an additional measure, we sent email requests to each member of Group of Occupational Respiratory Disease Specialists (GORDS), our national network of occupational respiratory disease specialists, but no UK cases were identified.³

It seems therefore that artificial stone-associated silicosis is yet to be described in the UK. In the absence of easily accessible industry data relating to UK usage of these products, it is not possible to know whether the lack of reported cases is real or reflects a lack of awareness among clinicians. It is possible that cases have occurred, but we could not identify them as they have been reported using non-specific terms such as

pneumoconiosis in a 'stonemason' caused by 'quartz'.

It was interesting to note that the Australian cases of accelerated silicosis were typified by significant bronchoalveolar lavage (BAL) lymphocytosis, ranging from 31% to 54% in the three cases where it was performed. Similar levels of increased lymphocytes (35-41%) on BAL cellular analysis were also noted in two Spanish cases.4 This level of BAL lymphocytosis has not previously been noted in chronic silicosis and is typically found in other lung conditions such as sarcoidosis, a condition that shares many radiological features with silicosis.⁵ Hoy et al also reported that 5/7 Australian cases had undergone lung biopsies as part of their diagnostic work-up. It would therefore be interesting to hear more about the Australian experience; in terms of how easily individual clinicians were able to make a diagnosis of accelerated silicosis, and whether difficulties arose in excluding 'co-incidental' sarcoidosis. It seems likely that this might be a particular issue in younger workers without extrathoracic features of sarcoid, and where job titles (eg, kitchen fitter) aren't clearly suggestive of silica exposure.

As artificial stone products are likely to be used more in Europe, it is to be hoped that the lessons have already been learned by industry, and that the lack of reported cases continues due to more effective control measures. Time will tell, but for now it is crucial that clinicians have a heightened level of awareness of this condition, and that any cases are identified as soon as possible, in order to avoid the dreadful outcomes that have been reported elsewhere. ¹⁶

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