CORRESPONDENCE

Does occupational exposure to dust prevent colorectal cancer?

Editor—A recent report found that increased rates of stomach cancer coincide with decreased rates of colorectal cancer in populations exposed to dust.1 The report's author first noticed this in a cohort of Ontario miners, one of the populations considered in the report. The table compares mortalities in that cohort with those in the general male population of Ontario. The mortalities for several diseases (silicotic tuberculosis, stomach cancer, lung cancer, and pneumonia) are increased; mortalities for some other diseases (chronic lymphatic and myelogenous leukemia, nasal and laryngeal cancer) are greater than in the general population but the increases are not large enough to be considered real and the mortalities for many of the remaining diseases are much less than those in the comparison population. Because the diseases in the first group are associated with exposures in the mines, should one then suggest that exposure to dust protects workers from those diseases such as pancreatic cancer, oesophageal cancer, bladder cancer, heart disease, and cirrhosis of the liver for which mortalities are lower than in the comparison population?

As Finkelstein remarks, because of the healthy worker effect, comparisons of mortalities in working populations with those in the general population give biased results. And as noted in another report,2 additional personal identifying information increases the mortalities found in occupational groups. Perhaps these two facts explain much of the deficit of mortality from colorectal cancer and other diseases found in populations exposed to dust.

Author's reply—Kusiak and colleagues have performed some brilliant work in collecting and analysing data about the mortality of Ontario miners and I am pleased to receive his remarks. The intent of my paper was to comment on the tendency of epidemiologists to focus on "positive" associations and to ignore "negative" ones. My comments on causation were largely "tongue in cheek". Nevertheless, as Kusiak points out, there were other disease causes and tumour sites in the Ontario mining population with lower than expected mortality. It is not implausible that some of these might be influenced by dust exposure. The oesophagus lies on the ingestion pathway, and the bladder on the route of excretion. The challenge of course is to identify causality in an environment of confounding and multiple comparisons. Consistency of any of these findings across several cohorts might lead one to explore what factors are confounding the association or to consider the possibility of causality.

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Back pain and male parenthood

Editor—The article "Backpain and parenthood" written by Finkelstein raises new and interesting issues concerning male parenthood as a risk factor for back pain.1 It was mentioned that this finding had never been reported before. We have reported similar results of an association between self reported work impairment due to back pain and caring for children at a population of 269 male aircraft assembly workers.2 We had treated this factor as a potential confounder but had not specifically reported

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1 Finkelstein MM. Does occupational exposure to dust prevent colorectal cancer? Occup Environ Med: first published as 10.1136/oem.52.10.699-a on 1 October 1995. Downloaded from