

*CC found stuffed, just found this among so
unfiled papers. The comments on Soutar are
interesting. T.R. Tordella 20 July 1983*

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Edward Cordasco, M.D.
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Dear Dr. Cordasco:

I enjoyed seeing you again in Washington last week and hope you will send me a copy of your paper. I think it important to point out, insofar as it is possible, the differing toxic potentials of vinyl chloride monomer, polyvinyl chloride, and PVC degradation products. In some of the published reports, as you well know, there were mixed exposures.

I am enclosing a copy of our expanded study of vinyl chloride workers, which was published in 1981. Although the followup is still only through December 31, 1972, the size of the basic cohort increased from 8,384 to 10,173, the numbers located went from 7,128 to 9,677 (85% vs 95%), the man-years from 77,846 to 120,203, and the certified deaths from 352 to 707.

As you can see, the apparent excess of buccal cancers disappeared. No new ones were found, but the expected number increased. There was still a slight excess, with an upward trend with exposure, for respiratory tract cancers. No SMR's were statistically significant, and the upward trend could have been an artifact, if one is dealing with a population with more heavy smokers than in the general population. The excess of tumors of the central nervous systems has, I think been studied by others since these first reports, without any demonstrated association with vinyl chloride.

If you have any first-hand data on pneumoconiosis from the inhalation of PVC dust I would very much appreciate getting a summary. The reports from Mount Sinai (Lilis et al, Miller et al) were relatively unconvincing to me. The exposures were mixed and the linkage with VCM or PVC very uncertain. Lilis et al did not categorize the radiographic patterns. The Mount Sinai readers have a tendency to over-read films when compared with most radiologists. You will note an unusual proportion of those with less than 5 years exposure were reported positive (9/54 or 17%). Miller et al were very cautious about blaming VCM or PVC for the apparent reduction of maximum flow rates; to me their results were plausible, however, but they suggest chronic bronchial irritation rather than pneumoconiosis.

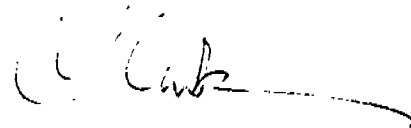
The work by Soutar et al was much more comprehensive and had the advantage of concentrating on PVC dust, with minimal overlap with VCM. To me the most interesting aspect was how very little they found. Only one of three radiologists reported small opacities in the films which correlated with PVC dust exposure, and he found none higher than

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category 1/1. There were only 4 in this category, in 818 examinations. He reported only 10 radiographs with small rounded opacities 1/0 or greater. There was a small reduction in FEV_1 reported associated with exposure to PVC dust. Exposure to 1 mg/m^3 for one year was associated with an FEV_1 loss of 4.1 ml, compared with the 26 ml reduction per year in non-smokers and 39 ml per year for cigarette smokers (plus 5.6 ml per pack-year).

Again, I want to express my pleasure at seeing you and wish that we had had a longer opportunity to chat over our mutual interests.

Sincerely,



W. Clark Cooper, M.D.

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