

As part of the 50th birthday celebration, we are arranging to reprint 12 papers, *the editor's choice*, which have appeared in previous issues of the *Journal*. They have been chosen partly to illustrate the range and scope of the *Journal* over the years and partly because they are or were important in their day. More significantly, they have been chosen because they exemplify some of the best in scientific writing and can all be read with great pleasure and all who wish to communicate their observations, their ideas, or their enthusiasms would do well to study them and learn from them.

We will publish one paper each month through the year and they will appear in the order in which they were originally published.

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## *Editor's Choice*

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### Chronic mercury poisoning

by Monamy Buckell, Donald Hunter, Reginald Milton, and Kenneth M A Perry

(*British Journal of Industrial Medicine* 1946;3:55-63)

It would hardly be possible to imagine a selection of papers from the *Journal* that did not contain at least one by Donald Hunter, the first editor. Hunter, who was never himself an occupational physician in the sense that he was never employed in industry, nevertheless had the most profound effect on occupational medicine. His pre-eminent place was due in large measure to his *Diseases of Occupations*, which appeared first in 1955 and went through six editions before his death. There can have been few, if any, textbooks of medicine that were such a pleasure to read and that were so full of good advice. Even now the section on the social history of occupational health is worth a read. If the later editions of the book started to show their age, this is perhaps the occupational hazard which besets the author of a big popular work. The new, multiauthored continuation of the book bears little resemblance to the original in style or readability and in my view would best be called something else. It is such a pity that there is no longer anyone with either the breadth of knowledge or the writing ability to produce another work in the same class.

The second way in which Hunter had such an influence was through his students, several of whom became—or remain—prominent in occupa-

tional medicine. Unfortunately I never knew Hunter but my first boss, A R Thompson, who was chief medical officer at Vauxhall Motors had been a student at the London Hospital and had a vivid recollection of Hunter's lectures which were remembered by all present long after the event.

The paper reprinted here is a classic study of chronic mercury poisoning which, surprisingly, given its long history, had never been fully investigated in industry. The paper contains a splendid description of the toxic organic psychosis produced by mercury in which "the man affected is easily upset and embarrassed, loses all joy in life and lives in constant fear of losing his job. He has a sense of timidity and may lose self control before visitors . . . if one stops to watch such a man in a factory, he will sometimes throw down his tools and turn in anger on the intruder, saying he cannot work if watched. . . Drowsiness, depression loss of memory and insomnia may occur, but hallucinations, delusions and mania are rare."

The description of the method for measuring urinary mercury concentrations in the paper is a good example of the elaborate techniques that were necessary in the days before atomic absorption spectrophotometry and the rest which now make capturing the stray molecule in any body fluid so (comparatively) easy.

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## Correspondence and editorials

The *British Journal of Industrial Medicine* welcomes correspondence relating to any of the material appearing in the journal. Results from preliminary or small scale studies may also be published in the correspondence column if this seems appropriate. Letters should be not more than 500 words in length and contain a minimum of references. Table and figures should be kept to an absolute minimum. Letters are accepted on the

understanding that they may be subject to editorial revision and shortening.

The journal now also publishes editorials which are normally specially commissioned. The Editor welcomes suggestions regarding suitable topics; those wishing to submit an editorial, however, should do so only after discussion with the Editor.

University of Newcastle upon Tyne, Newcastle upon Tyne, NE2 4HH, UK.

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### **Destruction of manuscripts**

From 1 July 1985 articles submitted for publication will not be returned. Authors whose papers are rejected will be advised of the decision and the manuscripts will be kept under security for three months to deal with any inquiries and then destroyed.

seemed to be a progressive decrease in percentages of OKT3<sup>+</sup> and OKT4<sup>+</sup> cells and the OKT4<sup>+</sup>/OKT8<sup>+</sup> ratio, and an increase in percentage of OKT8<sup>+</sup> cells in those with radiographic abnormalities. Also, there were no significant differences between the various asbestos exposures.

As immunoregulatory disturbance usually results from changes in B and T cell numbers, especially in T cell subpopulations and the OKT4<sup>+</sup>/OKT8<sup>+</sup> ratio, study of these changes may help to investigate the immunological pathogenesis of asbestosis. The analysis of T cell subsets as well as B and T cell numbers may have diagnostic and predictive value for the asbestos related diseases.

- 1 Weitao T, Shujun M, Dan X. Determination of T-cell subsets in the peripheral blood using both direct and indirect SPA rosette. *Journal of Beijing Medical University* 1987;19:439-40.
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## Vancouver style

All manuscripts submitted to the *Br J Ind Med* should conform to the uniform requirements for manuscripts submitted to biomedical journals (known as the Vancouver style).

The *Br J Ind Med*, together with many other international biomedical journals, has agreed to accept articles prepared in accordance with the Vancouver style. The style (described in full in *Br Med J*, 24 February 1979, p 532) is intended to standardise requirements for authors.

References should be numbered consecutively in the order in which they are first mentioned in the text by Arabic numerals above the line on each occasion the reference is cited (Manson<sup>1</sup> confirmed other reports<sup>2-5</sup> . . .). In future references to papers submitted to the *Br J Ind Med* should include: the

names of all authors if there are six or less or, if there are more, the first three followed by *et al*; the title of journal articles or book chapters; the titles of journals abbreviated according to the style of *Index Medicus*; and the first and final page numbers of the article or chapter.

Examples of common forms of references are:

- 1 International Steering Committee of Medical Editors. Uniform requirements for manuscripts submitted to biomedical journals. *Br Med J* 1979;1:532-5.
- 2 Soter NA, Wasserman SI, Austen KF. Cold urticaria: release into the circulation of histamine and eosino-phil chemotactic factor of anaphylaxis during cold challenge. *N Engl J Med* 1976;294:687-90.
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levels on Jackson and Jones's graph are interesting, although they are semiquantitative. The relation of the haemolytic anaemia with maleic anhydride was based on his known sensitisation to maleic anhydride and the temporal relation between exposure and disease. The graph does seem to show an increase in exposure to maleic anhydride at least before the second episode of haemolysis. It is true that the tests we performed looking for *in vitro* haemolysis in the presence of maleic anhydride were negative but the laboratory concerned had never done these tests before. Our original paper also noted that maleic anhydride was used chemically to modify erythrocyte membrane proteins to produce a foreign protein. This provides a mechanism by which maleic anhydride may cause haemolysis.

The findings of Jackson and Jones of positive antibodies in workers without symptoms is interesting. In the only study we are aware of with this type of result, the positive RAST cut off was obtained by calculating isotope binding three standard deviations above the mean of that in 20 samples of umbilical cord blood. This could be anywhere between 0.4% and 1.4%. By contrast our worker's maleic anhydride RAST binding ranged from 10.5% to 15.6% which is of a completely different order and less likely just to reflect exposure.

One of the unusual features of the reported case is the persistence of IgE antibodies after occupational exposure ceased. The concentrations decreased, however, at the rate seen for other acid anhydrides and are consistent with removal from exposure with some re-exposure. We point out that environmental exposures do not only occur when the worker is at home, and it is likely that our worker went closer to the factory than 8 km on occasion after leaving work. Source of re-exposure other than factory emissions include contact with contaminated workmates outside the workplace induced by antigen on their hair and clothing, for example.

We were aware of disagreement with our patient's account of his symptoms but Jackson was kept informed throughout the preparation of the paper and our patient was shown Jackson's comments and

allowed to modify his account before publications.

We understand Jackson and Jones' concerns that haemolytic anaemia is not incorrectly associated with maleic anhydride. If a clinician subsequently has to deal with an autoimmune haemolytic anaemia in a worker who is exposed to maleic anhydride, however, we believe that our report serves to point out that workplace exposure should be added to the list of possible aetiologies.

ting bias in occupational studies, statistical control of confounding, interpreting statistical results, epidemiological surveillance in the workplace, basic occupational health data analysis, critical assessment of published occupational studies.

For further information please contact: Dr Kenneth A Mundt, ICOE Director or Walter Dieckmann, Dipl rer soc, ICOE Manager, Akademie für öffentliche Gesundheit, Overbergstrasse 17, D-4630 Bochum 1, Germany. Telephone (49)-(0)234-700-5162; Fax: (49)-(0)234-7094-325.

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## NOTICES

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**An international congress on occupational health will be held in Nice, France 26 September-1 October 1993.**

This is a major event in the life of the International Commission and to a wider extent in the world of occupational health and the industrial environment.

For a brochure and registration form (reduced prices for replies received before 1 May 1993) contact: **CO24 France, Les Miroirs Cedex 27, 92096 Paris La Defense. Telephone 33 (1) 47.62.33.70; Fax 33 (1) 47.62.31.53.**

**An intensive course in occupational epidemiology will be held in Wermelskirchen, Germany, 23-28 May 1993.**

The intensive course in occupational epidemiology (ICOE) is a five day instructional course in the concepts, approaches, methods, analysis, and interpretation of occupational epidemiological research. It is specifically designed to provide occupational physicians and other interested health professionals with the essential background necessary for critically reading and interpreting published epidemiological research, designing basic epidemiological studies, and assembling and analysing data pertaining to the health of worker populations. Course topics will be the epidemiological perspective, history of occupational epidemiology, occupational study design options, basic analytical techniques, preven-