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Simplified techniques for identifying *Campylobacter pyloridis*

Recent correspondence has focused on simplified techniques for identifying gastric *Campylobacter pyloridis* on tissue sections as the Warthin-Starry stain is both unpredictable and time consuming. Pinkard *et al*¹ suggested phase contrast microscopy and Walters *et al*² suggested fluorescence staining with acridine orange. Although we agree these are simple techniques, they rely on having fluorescence or phase contrast microscopes easily available, which in many hospitals is not feasible.

We favour a modified Giemsa technique that is simple, permanent, and quick to perform with the organisms easily visible under light microscopy (figure). Paraffin embedded sections are routinely dewaxed and taken to water and then incubated in 2% Giemsa

solution in distilled water for 30 minutes at room temperature. After rinsing in tap water the sections are quickly dehydrated through ethanol solutions before being cleared with xylene and mounted in DPX.

To check on the accuracy of the modified Giemsa stain in identifying *C pyloridis* a comparison between Giemsa and Warthin-Starry stained sections in 35 patients was made by a single histopathologist. No difference was found in the rate of identification for *C pyloridis*, with many of the Giemsa stained sections being easier to interpret. The technique is thus quick, simple, possible in all laboratories and as accurate as the Warthin-Starry stain, which it has replaced in our laboratory.

Book reviews

Atlas of Cancer in Scotland 1975-1980. Incidence and Epidemiological Perspective. Ed in Scotland: I Kemp, P Boyle. IARC Scientific Publications no 72. (Pp 282; £35.) Oxford University Press. 1985. ISBN 92 832 1172 3.

This costly and ambitious atlas of cancer incidence is the outcome of collaboration between Scotland's cancer registries and the International Agency for Research on Cancer, a WHO organisation based in Lyon, France. For the benefit of foreign readers, the substantive core of the book is preceded by brief chapters on Scotland and its people, with rather special emphasis on diet, alcohol intake, and tobacco consumption. The book

is a modern manifestation of what was once called "geographical pathology."

The main data are drawn from the five separate regional cancer registries, which differ somewhat in their techniques of registration, especially in the extent to which they depend on discharges recorded by the Scottish Hospital Statistics Scheme (SMR 1). The authors claim that the registration system is now efficient, being subjected to several internal checks that take death certification into account. It is admitted, however, that there can be weak links in a chain, dependent on the assiduity of numerous hospitals. The material is presented according to Scotland's 56 local government districts and four main cities. For each cancer site the male and female incidence is first described, it is next compared with that in other parts of the world, then examined for

statistical evidence of clustering among adjoining districts, finally the cancer is discussed briefly in terms of possible explanations or risk factors. The maps are both in colour, on a relative scale, and in black and white, on an absolute scale. Accompanying tables detail crude rates, age, standardised rates, and assessments of which district rates differ significantly from those of the rest of Scotland.

For a full appreciation of the technical features of this atlas, readers must carefully study Appendix II, which provides an explanation of the advantages of the absolute and relative scales, an account of why the red and green colour notation was chosen, and very important notes on the way of calculating the randomness or otherwise of observed spatial patterns of incidence.

Clearly these maps and the data on which

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