swabs gave the same result for each of the pair. Of the remaining four pairs (6·1%) of swabs, one of each pair gave a positive result and one a negative result. This could reflect a difference in the amount of antigen present.

Table 2 shows that of the remaining 90 pairs of swabs where one was tested on day 1 and one on day 5, 86 (95·5%) paired swabs gave the same results for each of the pair. Of the remaining four pairs (4·4%), three gave negative results on day 1 and positive results on day 5 and one pair gave a positive result on day 1 and a negative result on day 5.

The effect of storage on samples with low amounts of antigen has not been established in this study and needs further investigation. Our results suggest, however, that the discrepancies in the results were more likely to be due to the difference in the amount of antigen in each sample rather than the effect of storage. If this is the case samples from different clinics could be stored and tested in batches without effecting the results, which is of practical and economical value, especially in peripheral hospitals with limited resources.

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Table 2 *Results of paired samples tested**

	Total No of paired swabs
First day negative and fifth day negative	66
First day positive and fifth day positive	20
First day positive and fifth day negative	1
First day negative and fifth day positive	3
Total	90

*One swab tested on day 1, the other on day 5.

Bacteria on blood films

Even in severe septicaemia bacteria are rarely seen on a peripheral smear,[1] and the occasional reports of such findings in Gram negative septicaemia have been confined to meningococci.[2 3] We now report similar findings in a case of *Klebsiella* infection.

An 18 month old Nigerian boy was transferred from Lagos for further management of acute lymphoblastic leukaemia. Infective complications of induction chemotherapy had included a *Klebsiella* pneumonia and an *Escherichia coli* urinary tract infection, which had both been successfully treated with gentamicin. Assessment on admission suggested haematological remission. Forty eight hours later a fever of 38·5°C developed, for which no cause was found, and which responded to a 10 day course of intravenous gentamicin and azlocillin. Twenty four hours after these antibiotics were stopped his fever returned, accompanied by a sudden deterioration in his clinical condition. The haemoglobin was 11 g/dl, white cells $0{\cdot}7 \times 10^9$/l (2% neutrophils, 98% lymphocytes), and platelets were 140×10^9/l. Blood films of vacutainer edetic acid samples from Hickman and peripheral sites showed clumps of rod like structures, with occasional cocci interspersed (figure). Repeated sampling from both sites using fresh stains consistently showed similar appearances. A Gram stained spun deposit of a 1/5 dilution of blood in distilled water showed that the clumps consisted of Gram negative bacilli and occasional Gram positive cocci. Twenty four hour subcultures of two sets of blood cultures from Hickman and peripheral sites confirmed the presence of Gram negative bacilli, later identified as *Klebsiella pneumoniae*. Gram positive cocci were not seen or cultured. Despite immediate treatment with intravenous gentamicin, azlocillin, and flucloxacillin his condition deteriorated and he died forty eight hours later. Subsequent disc sensitivity testing showed that the organism was resistant to all three antibiotics.

The rarity of overt bacteraemia on a blood film is related both to the low concentrations of organisms in most bacteraemias ($< 2 \times 10^2$ colony forming units/ml) and the large concentration probably needed to visualise organisms on a blood smear ($5 \times 10^4 - 1 \times 10^5$ colony forming units/ml).[1] Reik[1] suggested that *Neisseria meningitidis* is the only Gram negative organism ever likely to be present in such a high concentration. This case clearly shows otherwise, and the finding of Gram negative clumps should not be dismissed as laboratory contamination.

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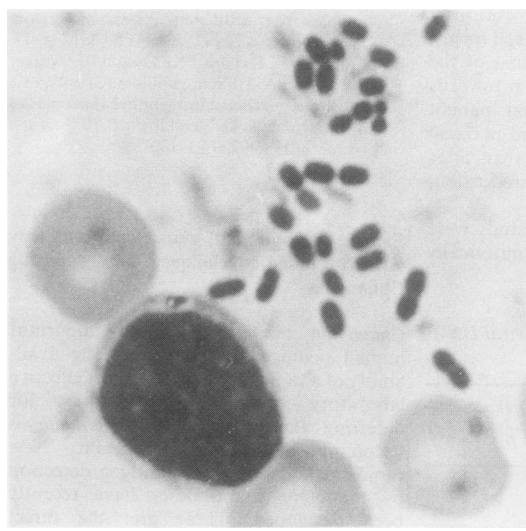

Peripheral blood film showing clump of extracellular bacteria.

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Prevalence of atypical naevi in a general pathology practice

I read with interest the recent article by Seywright *et al*[1] on a proposed subclassification of "dysplastic naevi" based on architectural and cytological atypia. Their results showed that out of 100 melanocytic naevi reviewed, 38 were regarded as being atypical—that is, exhibited either architectural atypia alone or in combination with cytological atypia. Such a high prevalence in this series most likely reflects the source of the material, which was the university department of dermatology, which has a referral centre for pigmented lesions and, indeed, as the authors correctly pointed out, that such findings should not be regarded as representative of the incidence of atypical naevi in the Scottish population as a whole.

Prompted by these results I decided to review the histology of 114 consecutive melanocytic naevi reported in 1985 from a general pathology practice consisting of two consultants, one of whom has a special interest in dermatopathology. The Table illustrates the main findings using the terminology suggested by Seywright *et al* in their article.

From these results it can be seen that about 6% of all the melanocytic naevi in this series were in the atypical category. This figure compares favourably with those of previous reports in which the prevalence of "dysplastic naevi" in the general population was estimated to be about 5%.[2–4]

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Total No of melanocytic naevi	*Banal naevi*	*Atypical naevi*	*Architectural atypia*	*Architectural and cytological atypia*
114	107	7	6	1

Book Reviews

Pathology Annual 1986. Part I. Series eds SC Sommers, PP Rose, RE Fechner. (Pp 358; £69.55.) Prentice Hall. 1986. ISBN 0-8385-7772-5.

This volume brings an era to an end; that of Dr Sommers who fathered, conceived, and delivered the series for 20 years. His stated philosophy of bringing contributions from mature and experienced professionals to the public in a form that was understandable by all has largely been fulfilled, and we owe him a gratitude. The present Annual fairly reflects the trends set in the past. The choice of topics is eclectic, if at times uneven, but there is much to interest many, though not necessarily all. First, we have a book within a book, the extensive review of head and neck cancers, complete with diagrams, charts, statistics, and backed by a mass of detailed and up to date information. The chapters on endocrine cell hyperplasias, divergent differentiation in neoplasms, and diversity of osteosarcomas have a similar message: there is more to it than meets the eye. Tumour host interactions, papilloma virus induced neoplasia, midline granuloma syndrome, atypical mycobacteria, the vexation of mesothelioid hyperplasia *v* neoplasia, aspiration cytology of the liver are all useful, if not definitive accounts. We also have the usual literary contribution, this time on infanticide in 18th century England. The price for the book, however, remains high.

PP ANTHONY

Guides to Clinical Aspiration Biopsy. Prostate. Tilde S Kline. (Pp 189; £43.75.) Williams & Wilkins. 1985.

This monograph gives a full account of the role of aspiration biopsy cytology in the diagnosis of prostatic pathology. The clinical value of the method in primary diagnosis and in the management of established malignant disease is emphasised, as is the importance of clinical cooperation in the skilled collection technique. The cytological appearances and the pitfalls in diagnosis are described and illustrated. Although the photomicrographs are generally of a satisfactory standard, in some chapters they seem to be rather repetitive. A chapter on immunocytochemistry has presumably been included because of the contribution the technique can make to the diagnosis of metastatic prostatic disease. A section devoted to the cytology of "dysplasia" is somewhat surprising as this controversial diagnosis cannot contribute to clinical care. Although this book makes no further important contribution to the accounts given in the existing texts, particularly the Scandinavian ones, it might prove useful in departments with a special interest in prostatic pathology.

HELENA E HUGHES

Subcellular Taxonomy. An Ultrastructural Classification system with diagnostic applications. AIC McLay, PG Toner. (Pp 80; $41.50 US and Canada.) Hemisphere Publishing Corporation. 1985. ISBN: 0-89116-293-3.

This volume attempts to overcome the shortcomings of SNOP and SNOMED for the ultrastructural pathologist, providing a coding system that should occupy the T-YX section of SNOMED. The problems of ultrastructural coding in diagnostic work are considered in the introduction, and as they are defined in that section, seem to be adequately resolved here. As entertainment, the test is less compelling than HB Morton's *List of Huntingdonshire Cabmen*, but when used to classify six ultrastructurally studied biopsies it proved effective and simple to use.

CL BERRY