on the 10 min samples. Since 1% formalin (0.4% formaldehyde final concentration) kills Marburg² and Ebola (ETW Bowen, personal communication, 1980) viruses in one hour or less, we consider 100% formalin for at least 1½ h to be an effective sterilising procedure. Undiluted formalin (BDH) contains about 0.13 mEq (mmol)/l Na⁺ and less than 0.002 mEq (mmol)/l K⁺. Interference from these is compensated for by using formalin in place of water when preparing the standards and the blank solution used to calibrate the flame photometer.

To determine whether or not the use of formalin influenced the results, we diluted ten human sera in triplicate in formalin or distilled water and analysed them for sodium and potassium. Using Fisher's paired *t* test to compare the results, we found that for sodium and potassium there was no difference between the two diluents at the 95% level of significance. The use of formalin as a diluent should not, therefore, introduce additional uncertainty into a laboratory's own estimate of the precision and accuracy of their flame photometry.

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Carriage of group B streptococci in the upper respiratory tract

Recent reports^{1,2} from the USA have suggested that the throat may be a significant source of group B streptococci (GBS), and that these organisms may play an important role in the aetiology of sore throat. However, our findings amongst a population of school-children in Edinburgh indicate that this is not necessarily the case in the UK.

Beta-haemolytic streptococci were isolated from the upper respiratory tract of 78 (19%) of 416 children aged 5-18 yr.

Identification of the streptococcal isolates showed that only nine children were carriers of GBS, a carrier rate of 2%. Carrier rates of groups A, C, and G streptococci were 11%, 2%, and 4% respectively. A significantly greater number of children aged 5-12 yr were streptococcal carriers in comparison with the older children (*p* < 0.001).

This study was performed during the winter when peak streptococcal carrier rates are expected,³ and a subsequent reduction in carriers during the summer is likely. These results do not, therefore, show that the upper respiratory tract is a significant source of GBS in children.

Evaluation of various sampling and identification techniques for streptococci throughout the study confirmed some of our earlier findings.⁴ Storage of swabs in Amies' transport medium before laboratory processing did not increase recovery of streptococci; selective growth media previously described¹ did not increase numbers of streptococci isolated; and the CAMP test and Streptosec coagglutination test⁵ (Organon UK Ltd) proved to be entirely reliable in identification of isolates.

We await with interest any forthcoming reports which may confirm the difference in GBS carrier rates in the upper respiratory tract between children in the USA and the UK.

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Chronic eosinophilic pneumonia and rheumatoid arthritis—coincidental?

We were interested in the paper by Dr Cooney (February 1981)¹ in which a possible relationship between chronic eosinophilic pneumonia (CEP), bronchiolitis obliterans and rheumatoid arthritis was postulated. We recently described three cases of CEP and reviewed the published reports of 60 cases in which histology of the lung was described.² In none of these cases was there any evidence of arthritis. In the two of our three cases who had open lung biopsies there was bronchiolitis obliterans of the polypoid variety similar to that described by Cooney. Although we did not see any fibrotic bronchial lesions, in all three cases there was evidence of functional small airway disease after remission of the acute disease. This suggests that the healing of the bronchiolitis had resulted in irreversible changes.

Bronchiolitis obliterans was also a feature of one third of the biopsies in CEP reported by Gaensler and Carrington.³ The evidence as we see it is that bronchiolitis obliterans is an integral part of the disease of CEP and because of the severe damage to the bronchioles healing by fibrosis may result in permanent damage to the small airways. The relationship of CEP with rheumatoid arthritis is an intriguing one; however in view of the absence of this association in previously reported cases of CEP we think it is likely to be coincidental.

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