Table 1

Blood culture results (n =)	C-reactive protein range (mg/dl)	Mean
Sterile (235)	0-30.8	9.1
Positive (17)	1.9-31.2	15.0
Contaminated (7)	1.3-30.6	9.7

resurgence in interest in the measurement of serum C-reactive protein in several conditions, including infection.

A raised serum C-reactive protein concentration is unequivocal evidence of an active tissue damaging process.¹ Although a rise in C-reactive protein concentration is said to be an early and sensitive indicator of microbial disease,^{1,2} it is also a non-specific indicator of organic disease, and interpretation of a positive result may be difficult.

A study was carried out at St Thomas's Hospital to measure C-reactive protein in all patients undergoing blood cultures. The aim was to determine whether serum C-reactive protein was a useful predictor of clinically important positive blood cultures and whether the C-reactive protein in patients with bacteraemia was appreciably higher than the C-reactive protein concentration in patients whose positive blood cultures were deemed to be contaminated.

All patients who had blood taken for culture over seven weeks had blood taken at the same time for measurement of serum C-reactive protein concentration. The importance of positive blood cultures was determined by clinical assessment. C-reactive protein concentration was measured using the Emit C-reactive protein assay, an enzyme immunoassay technique. Serum was stored at -20°C before measurement of C-reactive protein.

Two hundred and fifty nine patient samples were included in the study. Two hundred and thirty five blood cultures were sterile after one week of incubation. Twenty four blood cultures yielded bacterial growth. Seventeen of these were regarded as clinically important. In seven cases the organisms grown were regarded as contaminants. The table shows the C-reactive protein values for each category.

The results of this study show that a single measurement of serum C-reactive protein concentration gives no useful indication of the presence of bacteraemia or, indeed, if the culture is positive, of whether the organism isolated is a contaminant. This conclusion is borne out by work carried out in the United States.

A serum C-reactive protein concentration <1 mg/dl strongly suggests that the patient is not bacteraemic, but in this study only 25 of 259 patients had a C-reactive protein value in this range. Measurement of serial C-reactive protein concentration would give

more information. A rapid rise in C-reactive protein concentration or a failure of the C-reactive protein concentration to fall after surgery, for example, might suggest infection, but by the time these serial C-reactive protein values were measured culture results would be available. In certain groups of patients where sepsis may be insidious and non-specific serial C-reactive protein measurement may be of more value. This has been shown to be true in neonatal sepsis⁴ and in cases of infection in leukaemic patients.⁵ Patients in intensive care units often have multiple pathology, and the interpretation of even serial C-reactive protein concentrations is likely to be extremely difficult.

Despite early enthusiasm for C-reactive protein as an indicator of infection this study, in common with others, shows that it is of limited use.

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Use of word processors for poster demonstrations

I agree with Hellquist¹ that the word processor is an invaluable tool for poster preparation; the format of the data presented can be easily changed into a paper for subsequent publication. Posters are often prepared at relatively short notice and under considerable pressure, when errors in tabulation or spelling may be overlooked and only spotted on return of the final photographic product.

A cheaper and more flexible approach than the photographic enlargement suggested by Hellquist¹ is to use a photocopier with an enlargement facility such as the Xerox 1040. Daisy wheel quality print can be repeatedly enlarged to create the headline and section headings, but quality noticeably decreases after the third enlargement (at 140% per enlargement). Improved enlargement results can be obtained if these titles are initially produced on a typewriter, such as an IBM Executive with a "Directory" face or one with a letter "expand" feature such as an IBM 6750; alternatively, Letraset can be used, or appropriate software purchased such as Signwriter, Wight Scientific. Graphics software can, of course, be considered for any diagrams.

It is sometimes necessary to prepare posters on the same work for a variety of audiences with different interests and expertise; the method of enlargement with a photocopier means that the poster can be easily and cheaply tailored. The quality of finish of the final article is perfectly adequate for a poster and not far short of that of a photograph, although the latter method may be preferred if the poster is to be exhibited as a long standing show piece.

I have found the book by Reynolds and Simmonds² to be full of helpful hints for poster preparation.

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Consecutive staining with Romanowsky and periodic acid Schiff reagents

Consecutive staining with Romanowsky and periodic acid Schiff reagents has been used in standard texts¹ to show the typical block periodic acid Schiff positivity of lymphoblasts. We describe how the technique may occasionally help in identifying individual cells as lymphoblasts in cases of acute lymphoblastic leukaemia thought otherwise to be in haematological remission.

A forty year old Kenyan man diagnosed as having acute lymphoblastic leukaemia in 1982 (30% marrow blasts, 20% block periodic acid Schiff positive) presented in September 1985, six months after maintenance chemotherapy had been stopped with symptoms of a flu like illness. His full blood count was normal and the film showed atypical