Letters to the Editor

Numbers of cultures obtained on various media

Specimen	No of specimens	ZN positive	No of positive cultures on:			
			LJ	LJ+P	NSK	SK
Urine	783	7 (0.9%)	7	7	7	9
Sputum	608	18 (3.0%)	9	16	17	19
Cerebrospinal fluid	123	1 (0.8%)	2	2	2	3
Gastric washings	10	1 (10%)	1	1	1	1
Pleural fluid	395	0	1	1	1	2
Pus	240	9 (3.8%)	7	7	7	7
Tissues	312	13 (4.2%)	9	10	13	14
Total	2471	49	36	44	48	55

LJ = Löwenstein-Jensen.

LJ+P = Löwenstein-Jensen with 0.5% sodium pyruvate.

NSK = liquid Kirchner.

SK = selective liquid Kirchner.

ZN = Ziehl-Neelsen.

load. The use of a selective Kirchner medium in routine isolation does have the disadvantage that a culture result is not possible for at least nine weeks after initial incubation. In those cases where only the selective Kirchner was positive the number of viable mycobacteria present in the original was very low. The selective Kirchner also has the advantage that it can act as an enrichment medium, allowing the mycobacteria to increase at the expense of any other bacteria present. In those specimens where large numbers of mycobacteria are present and contaminating bacteria absent, quicker results will be obtained with conventional culture media. The use of a selective Kirchner should therefore be seen as an addition rather than a replacement.

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Measurement of creatine kinase by reflectance spectroscopy and reagent strips—effect of EDTA

In our recent assessment of the measure-

ment of creatine kinase activity,¹ we showed considerable inhibition by EDTA of both the Seralyzer and the LKB/optimised reagent assays.

Although the property of EDTA to sequester bivalent metal cations required for the activation of creatine kinase is well recognised, the concentration of EDTA present in most commercial blood collection tubes (about 1.5 mg/ml blood) was not thought to be high enough to cause interference with these creatine kinase assays.

In the original study, Sterilin EDTA blood collection tubes were used. We have repeated this study using commercial EDTA tubes from three sources: a new batch from Sterilin and tubes from Trident and Labco, all containing essentially the same concentration of EDTA. Creatine kinase assays were performed on the Seralyzer and with the BCL optimised (37°C) reagents on both the LKB reaction rate analyser and the Centrifichem analyser. No appreciable inhibition by EDTA was found with the Seralyzer or with either of the two liquid chemistries with a wide range of creatine kinase activities.

The EDTA tubes used in the original study are now thought to have been rather old, although we have been unable to determine the date of manufacture.

Three conclusions may be drawn from these studies:

- The Seralyzer creatine kinase system and the conventional liquid chemistries studied do not suffer interference from most commercial EDTA blood collection tubes.
- EDTA tubes of recent purchase only should be used.
- In order to minimise any increase in EDTA concentration, these collection tubes should be filled with the recommended volume of blood.

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Reference

- Stevens JF, Tsang W, Newell RG. Measurement of the enzymes lactate dehydrogenase and creatine kinase using reflectance spectroscopy and reagent strips. *J Clin Pathol* 1983;36:1371-6.

Is enrichment culture necessary for the isolation of *Campylobacter jejuni* from faeces?

We were interested to read the discussion of the relevance of enrichment culture to the isolation of campylobacters from human faeces.¹ We have used enrichment in modified Preston broth² as part of our method for campylobacter isolation since August 1982. Since that time 33 campylobacter isolations have been made from about 2000 specimens of human faeces in this laboratory. Of these 33, direct plating on to Preston³ and Skirrows⁴ agars failed to show the presence of campylobacters in six specimens, and isolation was achieved only by the use of enrichment.

Of the six samples which were positive by enrichment culture only, two were from patients whose symptoms had declined and therefore represent "convalescent specimens" as described by Hutchinson and Bolton.¹ The remaining four specimens, however, were from a single patient and were taken before the onset of diarrhoea (one) and during the acute phase of the illness (three), which lasted 12 days.

We therefore support the view of Hutchinson and Bolton¹ that enrichment culture has little effect on the isolation of campylobacters from most patients with acute diarrhoea, provided that a good selective agar is used and that the delay in culturing specimens is minimal. It should be recognised, however, that in some cases the use of enrichment culture is necessary for the isolation of campylobacters from patients with acute campylobacter enteritis.

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