

sinking to the bottom of the jar, but the second change of the solution has remained clear while the liver remains dark green in colour.

A considerable number of old specimens previously mounted in the Kaiserling sodium acetate glycerol preservative solution, which had undergone repeated discoloration after the fluid had been changed, have now been remounted in liquid paraffin. In the great majority there has been no further loss of pigment, but in one specimen of spinal column the blood pigment has continued to leak into the liquid paraffin. In a few a small amount of pigment has formed a thin sediment at the bottom of the jar.

It seems that the use of liquid paraffin as a final preservative solution in which pathological material is mounted will obviate much of the discoloration of the mounting fluid that so detracts from the appearance of pathological specimens in medical museums. Not only will the specimen look more lifelike, but there will also be a considerable reduction of

expense when less satisfactory Kaiserling preservative fluid, which has to be changed repeatedly, is replaced by the essentially inert, non-reactive liquid paraffin. It should be noted that 25 litres of liquid paraffin (British Drug Houses) cost £23.93 as opposed to £35.67 for a similar amount of glycerol (Fisons).

This method has been tried on fresh specimens for only one year, which is admittedly too short a time for final evaluation; many another promising technique has been proved wanting by the passage of time. However, we first tried liquid paraffin eight years ago on an enormous old spleen with chronic myeloid leukaemia, and the organ is still in a state of good preservation.

Reference

- Kaiserling, C. (1900). Über Konservierung und Aufstellung pathologisch-anatomischer Präparate für Schau- und Lehrsammlungen. *Verhandlungen der Deutschen pathologischen Gesellschaft*, 2, 203-217.

Letters to the Editor

A comparison of viral transport media

Following the report of Chaniot *et al.* (1974) that storage survival of some respiratory viruses was increased when HEPES rather than bicarbonate buffer was used in media, we report an initial comparison of the survival of herpes simplex virus (HSV) at room temperature in viral transport media (VTM) comprising Hanks' balanced salt solution (HBSS) and 0.2% bovine albumin, buffered (pH 7.2) with HEPES and bicarbonate respectively. When bottles of each were inoculated with a field strain of HSV to a concentration of 63 TCD₅₀/ml, viable virus was detected for 29 days in the former and for 21 days in the latter. Increasing the bovine albumin concentration to 1% in the bicarbonate VTM resulted in virus detection for 17 days, and when 0.425% lactalbumin hydrolysate was also included, for 15 days. Comparisons of the survival of respiratory syncytial virus (320 TCD₅₀/ml) in HEPES VTM and one

with HBSS, 1% bovine albumin and 0.425% lactalbumin hydrolysate showed survival of viable virus for at least 13 days in the former and for only three days in the latter.

These initial findings suggest that (a) the use of HEPES buffer results in longer virus viability, and (b) neither increasing the bovine albumin content nor adding lactalbumin hydrolysate significantly prolongs survival of labile viruses in bicarbonate buffered VTM. The increased cost of using HEPES instead of bicarbonate buffer is 33p/litre.

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Reference

- Chaniot, S. C. M., Holmes, M. J., Stott, E. J., and Tyrrell, D. A. J. (1974). An investigation of media for the long term storage of three respiratory viruses. *Archiv für die gesamte Virusforschung*, 44, 396-400.

Diagnosing thalassaemia trait from platelet count and England's discriminant function

We are very interested in Hegde's recent paper (Hegde *et al.*, 1977) reporting that a thalassaemia trait may be shown using England's discriminant function (DF): $DF = MCV - (Hb \times 5) - RBC - 3.4$ (1), calculated from indices obtained on a Coulter Model S, if the levels of Hb₂ and Hb F are within normal limits.

It appears, however, that this function is unable to distinguish between all cases of thalassaemia. England (England *et al.*, 1973; England and Fraser, 1973) found a negative value of the DF to be significant for thalassaemia trait and a positive one for iron deficiency; in Hegde's cases, the DF is positive in 7 of 13 confirmed α thalassaemia traits, in 19 of 57 suspected α thalassaemia traits, and in 3 of 20 β thalassaemia traits, that is, in about 30% of the heterozygous thalassaemias.

We reported (Seigneurin *et al.*, 1977) that the thrombocyte blood count used