

Correspondence

Because of heavy pressure on our space, correspondents are asked to keep their letters short.

Simple Blood-grouping Methods

SIR.—Dr. Margaret M. Pickles (*Journal*, December 24, 1955, p. 1561) and Dr. P. Kidd (*Journal*, January 14, p. 114) raise the important question of the best method of emergency blood-grouping and cross-matching in hospital laboratories, and criticize the rigid insistence of the National Blood Transfusion Service on a four-hour rule for this procedure. Dr. Kidd also comments unfavourably on the National Blood Transfusion Service because it issues only saline anti-D sera to hospitals for Rh typing, and states, "Methods using blocking antibodies and macromolecular diluents . . . are the only techniques capable of giving a rapid answer." But this, I suggest, is at least open to question on a point of fact.

In this laboratory we have used for over two years an emergency technique to which we were officially introduced by Dr. G. H. Tovey, and which uses, *inter alia*, saline anti-D sera issued by his National Blood Transfusion Service Laboratory. A trained worker using this method can in most cases determine the patient's ABO group and D type and cross-match suitable blood within 30 minutes of the receipt of a clotted blood sample.

It would be out of place here to describe the technique in detail, but in essence it uses albumin suspensions of red cells and saline anti-sera, and certain tubes are centrifuged both before and after 10 minutes' incubation at 37° C.; adequate controls are included and the results of the Rh-typing read macroscopically and of the cross-matching microscopically, both after the addition of saline. The tests involve the use of a special but inexpensive three-part metal rack (for tests at 37°, 17°, and 4° C.) which mates-up in one way only and contains holes of two different sizes, so that tubes containing anti-A and anti-B, and A cells and B cells, cannot be replaced incorrectly; labelling of tubes is also reduced to a minimum. We have to our knowledge not encountered any technical errors in ABO grouping and only a few false-negative and no false-positive Rh-typings (all emergency Rh tests are checked later), and we have not had any haemolytic transfusion reactions.

I have used in the past several other methods for emergency work, including the one Dr. Kidd advocates, although I have not used Eldon cards. Despite the reliability of the former, I am quite sure our present method is the quickest in an emergency and the most fool-proof, containing, as it does, several internal checks.

As Dr. Discombe points out, haste¹ and a worrying clinician² are the two worst enemies behind the pathologist or technician involved in an urgent request for blood. There can therefore be no justification for the use of an emergency procedure merely to cover up a delayed request for blood for casual transfusion. There is no doubt that then the four-hour rule is golden, and one not to be broken lightly, even in these days of deflated values.—I am, etc.,

Salisbury.

J. R. H. PINKERTON.

REFERENCES

- ¹ Discombe, G., *Lancet*, 1952, 1, 734.
² ———, *Blood Transfusion: A Guide to the Practice of Transfusion in Hospitals*, 1955. Heinemann, London.

Habitus Phthisicus

SIR.—Your careful annotation (*Journal*, January 7, p. 35) suggests the possibility that the relative longness-narrowness of the chests of phthisical males found in our study¹ may have been due to loss of abdominal fat occurring as a result of phthisis. We agree, and therefore the conclusion that there is an increased tendency for men with long narrow chests and hearts to develop tuberculosis cannot be drawn from the results obtained in men already phthisical.

However, this criticism could certainly not be applied to our work with the phthisis destined normal (P.D.N.) group in which we could pick out a statistically significant excess (over chance expectation) of P.D.N.s from their also normal non-phthisis destined controls. This was the case for workers N and B. Of 34 P.D.N. cases and their equal number of controls worker N, in attempting to select the chest tracings of the P.D.N.s from the non-phthisis destined normals, was right in 23 out of 34 pairs ($P < .01$), while worker B chose the P.D.N. from its control in 22 out of 34 pairs ($P = < .02$). Worker M, experienced in neither radiology nor somatotyping, just failed to attain statistical significance in his trial selection.

Thus it seems probable that, from the evidence obtained from work with normal chests alone (P.D.N.s and controls), men destined to develop phthisis in our series tended to have relatively long, narrow chests compared with controls not phthisis destined. Whether this was due to a loss of fat from unknown cause before phthisis appeared radiologically or whether it was characteristic of a particular somatotype cannot be decided without further investigation.—We are, etc.,

F. A. NASH.
W. T. C. BERRY.

London, S.W.17.

REFERENCE

- ¹ Berry, W. T. C., and Nash, F. A., *Tubercle*, 1955, 36, 164.

Oxytocin in Labour

SIR.—Following Dr. Derek Llewellyn-Jones's paper (*Journal*, December 3, 1955, p. 1364) on the use of oxytocin in labour Mr. John Stallworthy (*Journal*, December 4, p. 1560) rightly comments on the inherent risks of oxytocin drip infusion, and advises that amyl nitrite be kept in readiness as an antidote to any unwanted uterine spasm. We would go further and suggest that anticipation and thus prevention of this complication can be achieved by the use of a simple ink-writing external tocograph.¹ Such an instrument causes no discomfort to the patient, produces a graphic record sufficiently accurate for all practical purposes of the frequency and strength of the uterine contractions, and, more important, effectively indicates any tendency to incomplete relaxation between contractions. We do not nowadays employ an oxytocin drip infusion without this safeguard.

In the same issue (p. 1560) Miss Jean L. Hallum commends the use of dihydroergotamine in the induction of labour and in the treatment of the slowly dilating cervix, but in so doing she disregards the established oxytocic properties of the drug.² Dosage apart, there is no significant difference in action on the human uterus between ergotamine and its dihydro- derivative; ergotamine, the better-known alkaloid, if used in half the dosage recommended for dihydroergotamine, would secure the same results. For years now, ergot preparations have been shunned by clinicians because of their known danger when used in the first stage of labour. Since ergotamine is numbered with these preparations, there is every reason for including its congener, dihydroergotamine, in the general taboo.—We are, etc.,

M. P. EMBREY.
W. J. GARRETT.

Oxford.

REFERENCES

- ¹ Embrey, M. P., *J. Obstet. Gynaec. Brit. Emp.*, 1955, 62, 1.
² *British Medical Journal*, 1955, 2, 483.

Sickling and Malaria

SIR.—Your leading article on the above subject (*Journal*, July 30, p. 310) seems to us to be both untimely and incomplete. Untimely, because sufficient critical data are at present not available on which to base any assessment of the relationship between the two variables—sickling and malaria—and your review leaves readers with the impression that the problem of the relationship between sickling and falciparum infection has been settled, which it certainly has not. Incomplete, because it fails to mention the work of Archibald and Bruce-Chwatt¹ and Roberts and Lehmann.²