Clinical and other Notes.

A MEDIUM FOR THE PRIMARY ISOLATION AND SUBSEQUENT SUBCULTURE OF GONOCOCCI, PNEUMOCOCCI AND OTHER DELICATE ORGANISMS.

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This medium is a modification of that described by Majors Dimond and Lambkin (Vide Journal of the Royal Army Medical Corps, March 1927, page 161, and British Medical Journal, August 20, 1927, page 803).

The medium is prepared in two parts.

A. An Alkaline Autolysate of Meat Extract.

This replaces the alkaline autolysate of fresh ox-heart described by Majors Dimond and Lambkin. It has the following advantages:

1. Meat extract is far more easily obtained and kept in India than the fresh ox-heart.
2. The meat extract autolysate is much easier to prepare, entailing less time and trouble.
3. In India it seems to keep much better and is less frequently contaminated.
4. For the primary isolation of organisms it is just as satisfactory.

Preparation.—Asterile 500 cubic centimetre Erlenmeyer flask is required. Into this weigh 2 grammes of lemco, and add 200 cubic centimetres of distilled water. Shake this until no large particles of lemco remain in suspension.

Add eight cubic centimetres of normal NaOH, and shake the mixture well. Place in ice-chest and leave to autolyse overnight. On the following morning heat in a steamer for twenty minutes exactly. After cooling, place overnight in the ice-chest. The same procedure is repeated the next day. The autolysate is now ready for use.

B. The Agar-peptone Base.

Weigh twelve grammes of agar fibre and place in a 500 cubic centimetre Erlenmeyer flask. Add 200 cubic centimetres of distilled water, melt the agar in a steamer, preferably under pressure. This takes about half an hour. While it is being melted, weigh out the following and mix together:

- Witte's peptone : 12 grm.
- Sodium chloride : 2 grm.
- Disodium monohydrogen phosphate : 2 grm.
- Glucose : 0·4 grm.
When the agar is completely melted, add the above ingredients and shake well. Place in a steamer for a further half hour, and then leave to cool. This base is now ready for use.

On the day of preparing the medium, melt the agar base in the steamer. Heat the autolysate of meat extract for five minutes, and then mix with an equal volume of the agar base. Tube this off in ten cubic centimetre quantities, and keep in a water bath at 48° C., prior to adding serum, to prevent setting. Add to each tube while melted about $\frac{1}{4}$ to $\frac{3}{4}$ cubic centimetre of serum, and then slope.

Instead of using serum separated by clotting, I used the supernatant clear fluid, obtained by mixing blood with an equal volume of one per cent sodium citrate solution, and then allowing to settle. $\frac{1}{4}$ to $\frac{3}{4}$ cubic centimetre of this fluid was added to each test-tube. Medium made with this citrated plasma gave results as good as, if not better than, that prepared with ordinary serum.

To demonstrate the value of this medium, tubes of nutrient agar, blood-agar, Fildes' agar medium and other common laboratory media were inoculated at the same time with various organisms. The following observations were made:

1. Disodium monohydrogen phosphate acts as a buffer and keeps the medium at a more constant pH than usual, and less autolysis of the organism takes place. Cultures can therefore be kept alive much longer under ordinary conditions than usual.

2. The eight cubic centimetres of normal NaOH is partly neutralized during the process of autolysis. The final alkalinity of the autolysate is sufficient to give the medium a pH 7·2 to 7·4, which seems to be the optimum for the sensitive organisms.

3. In no case were the twenty-four or forty-eight-hour growths on ordinary agar, blood-agar, etc., nearly as luxuriant as those obtained on this medium.

4. Frequently colonies were observed on this medium after twenty-four hours' when there was no trace on the other media.

5. By placing a rubber cap on a test-tube containing a forty-eight-hours' growth of gonococci, to seal off the air, and keeping in an incubator, strains were kept alive for from six to eight weeks.

A CASE OF CONGENITAL HYPERTROPHIC STENOSIS OF THE PYLORUS.

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A first child, male, was born on November 15, 1928, weight 7½ pounds, and appeared quite healthy. On November 19 he was circumcised. The mother was unable to feed him and he was put on Cow & Gate Food. At the end of the first week he had lost seven ounces but was taking his feeds