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 ½ to ¾ 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. ½ to ¾ 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 7⅓ 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
Clinical and other Notes

well and there was no vomiting. On November 26 he started vomiting some feeds and the next day was still inclined to vomit and was constipated. Given calomel $\frac{1}{6}$ gr. for six doses and sodium citrate in each feed and by evening seemed all right again. The nurse left on November 29 when the child was said to be doing very well. On December 2 the mother reported that the food did not seem to satisfy the child, he cried a lot, vomited a good deal and was very constipated, weight $6\frac{1}{2}$ pounds. Seen on morning of December 3, he was given a feed and promptly vomited it very forcibly.

Pyloric stenosis was suspected and a consultation was held and owing to the difficulty of finding out from the ayah exactly what was happening it was decided to bring back the trained nurse and get a proper report after twenty-four hours. On December 4 it was found that the child kept down two feeds of one ounce and at a varying interval after the third feed brought back three ounces. The vomit was definitely forcible and constipation was marked.

A small feed was given and visible and palpable peristalsis of the stomach was noticed while a rather indefinite lump could be felt below the ribs on the right side. Weight six pounds. Now nineteen days old and looked starved and extremely emaciated with shrivelled face, sunken eyes and depressed fontanelle. The diagnosis of pyloric stenosis was made. Operation was carried out at once by Lieutenant-Colonel I. Davenport-Jones, I.M.S., Civil Surgeon. A minimum of chloroform was given, novocain being injected into the abdominal wall while subcutaneous saline was given at the same time. The abdomen was opened along the outer border of the right rectus and the first thing that presented itself was the greatly thickened and hypertrophied pylorus. It appeared tightly contracted and was as thick as a man's forefinger. It was brought into the wound and the thickened muscular coats divided in a longitudinal direction down to the mucous membrane. The outer coats were well separated from the mucous coat allowing the latter to bulge forward into the gap. The child stood the operation very well and had taken twelve ounces of milk and water by next morning and scarcely vomited at all. On December 10 he was taking two-ounce feeds of Allenburys food every three hours; there was no vomiting and the bowels were now open regularly. The stitches were removed and wound was found firmly healed. He put on seven ounces in weight. On February 1, 1929, he was perfectly fit and well and his weight was ten pounds.

This would appear to be an absolutely typical case of this rather uncommon condition said to be found most frequently in first-born male children who have been circumcised. It shows the rapid loss of weight, the forcible vomiting of accumulated feeds, the constipation, the tumour and visible peristalsis. The immediate confirmation of the diagnosis on opening the abdomen was dramatic and the result of operation almost miraculous.