

Ethionamide and Viomycin in Tuberculosis

Q.—*What is the place of ethionamide and viomycin in the treatment of tuberculosis ?*

A.—Both ethionamide and viomycin are relatively toxic drugs. The usually recommended dose of ethionamide (1 g. daily orally) often causes nausea, and sometimes treatment may have to be abandoned because of persistent vomiting. Viomycin may cause renal impairment, damage to the eighth nerve, and electrolyte disturbances, and because of these side-effects effective doses cannot be given daily for long periods. The recommended dose is 2 g. twice weekly or 1 g. four times weekly.

Because of toxicity both drugs are used as "second line" drugs in the retreatment of

patients in whom previous treatment with the "first line" drugs—that is, streptomycin, isoniazid, and para-aminosalicylic acid—have failed, because of the emergence of resistant organisms or intractable drug hypersensitivity or toxicity. Ethionamide and viomycin are used in combination with at least one other drug, and preferably two other drugs, which the patient has not received before or with previously used drugs to which the organisms are known to remain sensitive.

There must be no cross-resistance between the drugs in the treatment regimen or between these drugs and those previously used to which resistance may have been acquired. There is cross-resistance between ethionamide and thiacetazone and between viomycin, kanamycin, and capreomycin.

Corrections

We regret that the report of the conference on diagnostic radiology at the Royal College of Physicians (9 July, p. 110) misquoted Dr. D. H. Trapnell. The final sentence of this section should have read, "Dr. Trapnell had also shown that Kerley types 'A' and 'B' lines were due to interlobular septa in the depth and on the surface of the lungs, respectively, and not to the lymphatics."

Spiroolactone and Chlorothiazide.—We regret that in the Current Practice article on "Heart Failure" (25 June, p. 1585) there was an erroneous statement that spiroolactone was 20 times more costly than chlorothiazide. This statement was based on a mistaken pricing of chlorothiazide. In fact spiroolactone is between four and eight times as costly as chlorothiazide, depending on the relative dosage used.

NEW APPLIANCES

Grid Localization Technique for Intrauterine Transfusions

Dr. L. A. LEES, X-ray Department, St. Peter's Hospital, Chertsey,* writes: Since the pioneer work by Bevis (1950, 1952, 1953, 1956) on pigmentation of the amniotic fluid in haemolytic disease of the newborn much work has been done to lower the foetal death-

2. It is sterilizable and does not have to be removed for the actual transfusion. This eliminates error if the mother should move during the procedure.

3. The grid is held firmly but gently in place by elastic bands passed behind the

Two grids have been used since 16 July 1965, both having malleable copper wire of 16 s.w.g. for the surround of 25 by 30 cm.; and divided into 5-cm. squares, that on Fig. 1 by 5 mm. by 24 s.w.g. copper strip and that on Fig. 2 with 16 s.w.g. copper wire; all the

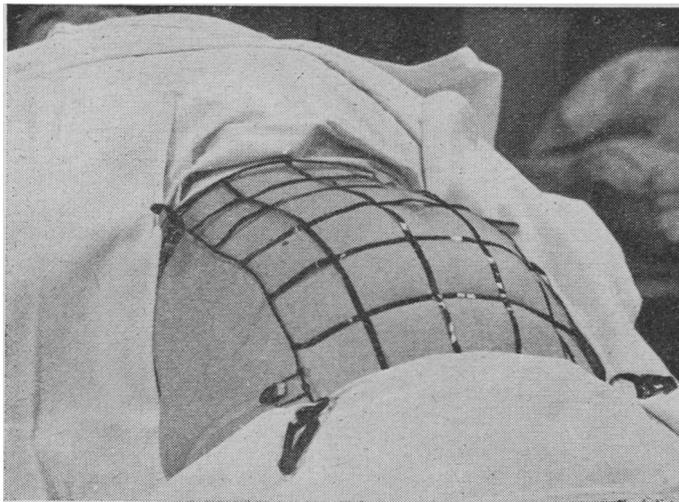


FIG. 1

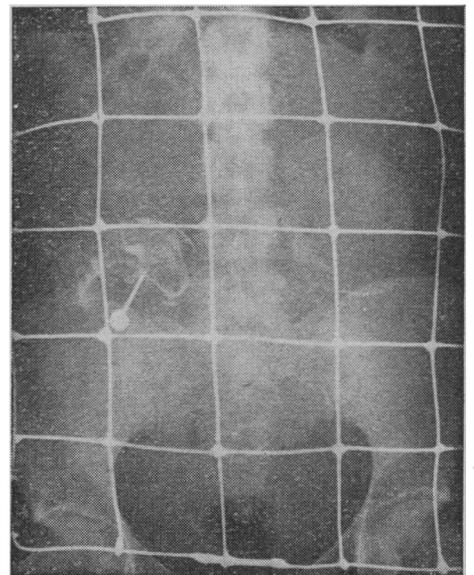


FIG. 2

rate, notably by Liley (1960, 1961), with intrauterine transfusion technique. Liley (1963) also delineates some of the pitfalls and errors of the method. Contrast is injected at amniocentesis and is concentrated in the foetal gut. Experience at St. Peter's Hospital has indicated that accurate localization of the outlined foetal gut with reference to surface marking on the maternal abdomen is of prime importance. Several methods for this are in vogue, such as closed-circuit television fluoroscopy, and metal markings—for example, ampoule files and ball-bearings stuck on to the maternal abdomen—and Wade, Davis, and Kohorn (1966) describe a method with the use of a grid localizer. The grid method described below (Figs. 1 and 2) offers a number of advantages over their method.

1. The grid is of convex shape in two planes, and is constructed of malleable copper, so as to fit over the maternal abdomen through a wide range of gestational periods.

mother, which hook on to the lugs fitted at the top and bottom of the grid sides (see Fig. 1).

4. Sterile towels may be easily held around the sides of the grid with standard clips. (In Fig. 1 the side towel has been withdrawn to show the elastic bands and hooks, which are not sterilized.)

5. This method involves minimum maternal handling, and hence very little disturbance to the foetus.

Apart from the "map reference," it has also been the experience at St. Peter's that the puncture-needle must be inserted absolutely vertically, and for this purpose a plumb line has been used, with two observers at right angles guiding the surgeon during the insertion.

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intersections are soldered. Since using this method the time for the procedure has been approximately halved and the patient's skin dose of radiation markedly reduced.

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