THE TREATMENT OF ANKYLOSTOMIASIS WITH BETA-NAPHTHOL AND THYMOL.

BY

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THE following notes on the treatment for ankylostomiasis which I have carried out for the past eighteen months in Zanzibar and Pemba, where the disease is very prevalent and known as "safuri" and "baridi," may be worth recording.

If the patients are debilitated and anaemic, as the majority are, before commencing the treatment proper I give them thrice daily a tonic containing ferri et ammon. citr., liquor arsenicalis, and liquor ammon. fort., which is continued in the intervals of treatment, and also afterwards until the patient is quite strong.

If possible I have them in hospital for preparation and treatment, or if they are unable to stay in hospital I get them to come in for one day weekly for treatment, which is as follows: In the evening I give a powder containing calomel 5 grains and sodium bicarbonate 10 grains. This is followed at 7 o'clock next morning with a draught of sodium sulphate 3 drachms, in water to 3 ounces. At 8 a.m. I give a mixture containing beta-naphthol 1/2 drachm, thymol 1/2 drachm, mucilage q.s., and water to 1 ounce. At 10 a.m. I repeat the beta-naphthol and thymol mixture, and keep the patients in bed until about 4 p.m., not allowing them any food or liquid whatever; after that time they are allowed fluid diet only for the remainder of the day. Those desiring to leave hospital may do so, to report again in seven days for treatment; but they send a specimen of their faeces on the day after leaving hospital for microscopical examination for the ova of ankylostoma. This is done after each treatment until free.

Of 171 cases treated I have been able to follow out the results of 116, the remainder not having reported for further treatment. The results are as follows: After one treatment, 34.5 per cent. were cured; after two treatments, 25 per cent.; after three, 17 per cent.; after four, 13 per cent.; after five, 6 per cent.; after six, 7 per cent.; after seven, 4 per cent.; after eight, 1 per cent. I have not given the fractions of the percentage, but have taken it to the nearest figure. In no case did I give more than eight treatments.

It is interesting to note that in some cases other well known treatments had been previously tried without effect, as the following cases will show:

Case 1.—After ten treatments of thymol ova were still present; the case was negative after three treatments with beta-naphthol and thymol.

Case 2.—After thirty-two thymol and three oil of eucalyptus treatments ova were still present; the case was negative after three treatments with beta-naphthol and thymol.

Case 3.—After three treatments with oil of chenopodium ova were still present; the case was negative after one beta-naphthol and thymol treatment.

Case 4.—After prolonged antimony treatment the case was still positive, but became negative after one treatment with beta-naphthol and thymol.

On examination of stools taken where the patient had no treatment after being (microscopically) free, the following results were found:

After one treatment the result of examination was negative after 7 months in one case, and after 4 months in another, but was positive after 5 months in a third.

After three treatments, two cases showed a negative result after 3 and 4 months respectively.

Of two cases which received four treatments, one was negative after 4 months, the other positive after 3½ months.

Of three cases which received five treatments, the first was negative after 2½ months, the second after 3 months; the third was still positive after 2 months.

One case which received seven treatments was negative after 2 months.

Two mental cases of melancholia and senile debility died after the second treatment, but showed no ill effects succeeding the treatment. In no single instance did I find the treatment affect the patients, and on the day following they were able to continue their work in the ordinary way.

It is difficult in such places as this to follow up one's patients as one would wish, and, moreover, the environment of the natives is one in which they are very likely to become reinfected after being free, because of their habits in

going about barefooted and the frequent sores on their feet owing to jiggers, etc. I think, however, that a result showing roughly 89 per cent. of cures in four treatments will justify a trial of the method.

I am indebted to Dr. B. Spearman, M.O.H. Zanzibar, and to his bacteriological department, for their examinations of the specimens of the above cases.

A SPLINT FOR MEDIAN PARALYSIS.

BY

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PHYSIOLOGICAL rest is a prime necessity in the recovery of a paralysed muscle. This is brought about by the mechanical approximation and retention of its two points of insertion so that its opponent is conversely elongated.

One of the difficulties hitherto in the treatment of a median lesion has been the proper retention of the median small thumb muscles in a properly relaxed position so that regeneration can take place with the greatest chance of success. A majority of cases do not show a satisfactory return to power of the opponens and short abductor of the thumb, as is evident in the

FIG. 1.—Showing the extreme flattening of the hand with the thumb "flush" with the palm and no power of apposition. Short thumb muscles are accordingly stretched.

number of cases of median lesions with a flat thenar eminence and inability to oppose the thumb to any of the other fingers. This is one of the most important movements in the useful hand, and is necessary for all the fine movements of the hand. Without it the utility of the hand is impaired by at least 30 per cent. As Mackenzie aptly puts it, the thumb represents one blade of a dissecting forceps.

The only method so far of in any way relaxing the short thumb muscles is by means of adhesive strapping applied round the thumb and the ulnar side of the hand. This has two important disadvantages. The skin of the hand, already without its beneficent trophic influence, rapidly becomes irritated and often becomes broken so that the adhesive plaster has to be removed. When wearing the plaster the patient's hand is entirely put out of action and he cannot use it for gripping, while the rubber solution in warm weather runs and becomes caught in anything he may attempt to grip. So irksome is it to the patient that it is usually worn only very intermittently.

The splint to be described has neither of the advantages that its only rival has, for the skin is amply protected by its chamois leather lining, while it in no way interferes with function, but rather aids it in making opposition of fingers and thumb possible.

The essential part of the splint (called the "Opponens splint") is a light duralumin plate which extends from the fifth metacarpal to the first and extends the length of the metacarpals except in the thumb, where it is rather longer, going just over the metacarpo-phalangeal joint. The plate is accurately moulded round a cast of the hand which has been made with the thumb in the opposed position in the same axis as the middle finger and with the first metacarpal abducted from the second as far as possible—that is, up towards the face of the patient when the forearm is supinated.

FIG. 2.—Splint applied. Thumb opposed and opponens and abductor relaxed. In useful position and splint not preventing use.

FIG. 3.—Drawing of the duralumin plate when flattened out. The thumb-piece is attached to the hand-piece at an angle of 140 degrees.

Description.