

restoring movement in hip joint surgery. According to his technique and approach the trochanter is untouched. It is pointed out that after trimming the head to the required extent there is shortening of the neck thus altering the mechanics of the hip joint. This becomes evident by a study of the Shenton's line in radiograms seen in the pictures. Such being the case it is surmised that prolonged weight bearing will cause a certain amount of disability due to strain on the glutei. Therefore it was thought advisable to modify this operation by using Jones' technique of approaching the joint as in the case of pseudo-arthritis and giving a lower insertion to the glutei to restore the Shenton's line to as far as possible to normal, to give a better 'point de appui' and thus improve

the mechanics of the joint. In the case under report there is a slight exaggeration of the curve of Shenton's line (figure 7, plate VII).

This case is reported to show the results of such an attempt 4 months after operation (figures 1, 2, 3, 4 and 6, plate VII). This range will improve with function.

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A Mirror of Hospital Practice

SEXUAL DISORDER IN 'MEPACRINE PSYCHOSES'

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THE development of violent mental psychoses following administration of mepacrine in a small percentage of patients suffering from malaria is now an established fact. Quite a large number of such cases have been reported in the medical press.

So far as our information goes, no case has been reported where such mental symptoms developed following administration of mepacrine for the treatment of intestinal infestation by giardia. We have had the opportunity of dealing with two such cases. One case (case 'A') was seen and treated by one of us (K. B. K.) at Lahore in 1946 and the other case (case 'B') was seen and treated by both of us recently (September 1949) in Simla. A summary of the main symptoms, laboratory findings, other investigations, treatment and ultimate outcome is detailed below:—

Case 'A'

Hindu male, 36 years, married, thin built, insurance agent by profession, temperamentally of a highly strung and nervous nature, leading a very unhappy domestic life. He had attempted suicide three times.

The patient suffered from frequent attacks of diarrhoea for two years. Repeated stool examination showed giardia infestation. He was treated by a colleague with mepacrine one tablet t.i.d. On the 4th day (after having

taken 11 tablets of mepacrine) the patient was observed to be more talkative and a little outspoken by his wife. He passed rather restless night and was mostly awake. The mepacrine treatment was continued. The symptoms were aggravated by the afternoon of the following day (after 14 tablets had been taken). The patient was extremely talkative discussing every conceivable topic. He was however neither aggressive nor abusive. The patient was examined by one of us (K. B. K.). After greeting the doctor with unusual eloquence and formality he suddenly slipped into a discussion regarding widely different subjects and at times became incoherent. He talked very highly about himself and specially about his sexual powers and capacities. He appeared excited, his conjunctivæ were injected and face somewhat flushed. There was no yellow tinging of skin or conjunctivæ. Tongue appeared moderately coated and moist. Temperature, pulse, respiration, etc., were all within normal limits. Blood pressure was somewhat raised. Blood examination showed total and differential white cell count as well as total R.B.C. and hæmoglobin to be within normal limits. Urine showed presence of traces of mepacrine. (Exact figures are not given on account of the loss of records in Lahore.) No other abnormality was observed.

Treatment given.—Mepacrine was stopped. The patient was given one ampoule of Dial (Ciba) intravenously (0.2 gm. in 2.3 cc.). The patient remained as boisterous and talkative. He showed signs of extreme sexual excitement as indicated by the fact that he tied down his wife to a bed and repeatedly forced himself on her till she swooned. He had to be removed forcibly. Dial, one ampoule (0.2 gm.), was

repeated intravenously after six hours and the patient fell off to sleep half an hour afterwards. He woke up after about two hours and was as boisterous as before. Two tablets of Dial suspended in milk were administered and repeated after six hours. Patient then slept for short intervals off and on during the day and by night he was much less talkative, but was still incoherent in his speech. He was given another intravenous Dial (0.2 gm.) and he slept for about 4 hours. The patient was then kept on Dial tablets in gradually decreasing doses for about 15 days, after which period the patient appeared fairly normal in his speech, behaviour, etc. He however felt extremely weak and remained in bed for about seven days afterwards.

In another week's time he was up and about pursuing his normal avocations. He could recollect most of his doings during his illness and felt ashamed about them.

He however committed suicide by taking opium following domestic unpleasantness four months afterwards.

Case 'B'

Bengali Brahmin, male, aged 52 years, weight 136 lb., height 5 feet 6½ inches, widower, accountant by profession and 'of a highly strung and nervous nature'.

The patient suffered from attacks of diarrhoea off and on for the last 20 years, was at one time diagnosed to be suffering from chronic colitis of unknown origin. Residence in Bengal, his home province, aggravated this condition, but stay in the Punjab improved his intestinal condition and general health.

An attack of violent diarrhoea (15 to 20 watery stools in 24 hours) occurred every year during the rainy season necessitating his absence from duty for a period of a week or so every time. The use of Kaopectate (Upjohns) and other anti-diarrhoeic medicines usually relieved this condition in about a week's time.

Laboratory findings: (1) *Stools*.—Stools were examined frequently during the quiescent period but no ova, amœba, cysts or pus cells were ever found. During the last attack of diarrhoea stools were examined and numerous cysts of *Giardia intestinalis* and *Trichomonas hominis* and a few pus cells were found.

(2) *Urine*.—It showed presence in traces of mepacrine and a faint trace of albumin.

(3) *Blood*.—Total R.B.C. 4,850,000 per c.mm. Hb. 96 per cent (100 per cent = 14.5 gm.). Total W.B.C. 6,800 per c.mm. Differential leucocyte counts—neutrophils 62 per cent, lymphocytes 28 per cent, monocytes 6 per cent and eosinophils 4 per cent.

The patient was advised to take mepacrine one tablet three times a day for five days and bismuth-kaolin mixture was prescribed in

addition. The intestinal condition improved rapidly. On the 3rd day the patient complained of hyperæsthesia of the skin all over his body, most marked however over the extremities. This condition worsened on the 4th and 5th day. On the fifth day of treatment (by which time he had taken 13 tablets of mepacrine) the patient showed signs of moderate restlessness. Later in the evening he looked excited and was rather talkative. He indulged in hurling vituperations at his children and on occasions burst into bouts of laughter without any rhyme or reason. He did not sleep during the night and his condition deteriorated by the following morning. He talked incessantly on various subjects and was very incoherent. He showed signs of sexual excitement and was found to take delight in discussing sex matters specially with the female members of his household. His penis was observed to be erect all the time and on one occasion he showed definitely erotic behaviour towards his own daughter-in-law. He was examined by us on the 6th day. Mepacrine treatment had already been discontinued as the prescribed course had been completed. The patient's general condition and behaviour were as described above: very talkative, incoherent, excited and abusive. There was no yellow tinging of skin or conjunctiva.

Temperature 98.2°F., pulse 78 per minute, respiration 19 per minute, blood pressure—systolic 152 and diastolic 80.

Treatment.—He was given one ampoule of Dial (Ciba) intravenously straightway. After half an hour of administration of Dial the patient became somewhat quieter. One ampoule of Dial was repeated after six hours intravenously. After an hour of the second dose the patient slept for two hours and on waking up he appeared less excited but still incoherent. He was given Theogardenal gr. 1 b.d. and a sleeping draught containing 30 gr. of sodium bromide and 15 gr. of chloral hydrate at 9 p.m. every night. In addition he received 2 cc. each of Crude Liver Extract and Vitamin B Complex (T.C.F.) daily by the intramuscular route for ten days. During this period the doses of Theogardenal as well as the bromide and chloral hydrate were gradually reduced and eventually given up after 15 days. He made an uneventful recovery. His memory after the period of mental disorder was intact and he could recollect to a great extent his actions and felt ashamed of himself.

Summary

1. Two cases of temporary mental disorder following mepacrine administration in patients suffering from giardia infestation are described.

2. There seem to be no premonitory symptoms or indications which would enable the physician to anticipate the advent of mental

symptoms in any particular patient under treatment with mepacrine. It is significant, however, that both of the cases were of 'highly strung and nervous nature'.

3. Intense sexual excitement was a marked feature in both the cases, cause of which needs further investigation.

4. The part played by Crude Liver Extract or Vitamin B Complex or both is difficult to assess. A bigger series of such patients must be investigated before a definite opinion can be

given. (Case 'A' was treated without and case 'B' treated with Liver Extract and Vitamin B Complex, but the rate of recovery was practically the same and the ultimate outcome was also similar.)

5. Both the patients recollected to a fair extent their unusual behaviours during their illness. This is in contrast to what some other workers have reported with regard to mental psychoses following mepacrine administration for the treatment of malaria.

Occasional Notes

THE VENEREAL DISEASE PROGRAMME OF THE WORLD HEALTH ORGANIZATION

THE SIMLA TRAINING CENTRE AND DEMONSTRATION AREA

PRESENTATION by JOHN C. CUTLER, M.D.

Veneral Disease Demonstration Team of the World Health Organization; Simla Branch of the Indian Medical Association, Simla, India, 29th June, 1949

As an introduction to the discussion of the venereal disease activities of WHO, it may be relevant to review briefly the aims, activities and accomplishments of the organization. The aims of the organization may be best summarized by a quotation from the constitution as 'the attainment by all peoples of the highest possible level of health'. The WHO was set up as one of the specialized agencies of the United Nations a little more than two years ago. From the beginning it was apparent that the health problems of the world, particularly in the under privileged and war devastated areas where funds, equipment and personnel are limited, are myriad.

The organization set out to carry out a programme in several fields. The demonstration and consultation services to governments provide for medical assistance in four major fields: Venereal Disease, Malaria, Tuberculosis, and Maternal and Child Health. The first three were chosen as being among the more widespread and serious of diseases which extract a fearful toll of life in addition to disabling men and removing them from productive work over long periods of time. Yet advances during the recent years have provided the medical profession for the first time in history with methods which make it possible to think in terms of control of these diseases on a large scale at a relatively small per capita cost. It was felt that aiding governments in their work in the

four fields mentioned, by means of demonstration teams, would be a most effective way to take advantage of existing knowledge.

Besides the actual medical assistance, the organization undertook to carry on some of the programmes of the League of Nations in epidemiologic reporting, standardization of medicinal products, etc., and to inaugurate a programme of collection of vital statistics.

As an adjunct to the activities already discussed, an intensive programme of educational activity was begun which comprised both granting of fellowships and publication of material of both general and specific public health importance. There have already been very concrete demonstrations of the value of international co-operation in health work. 'In the cholera epidemic in Egypt WHO's assistance to the Egyptian public health authorities . . . perhaps demonstrated most graphically how nations can co-operate against a common disease danger' (Calderone, 1948). Malaria control work has already shown results in Greece, the WHO Field Service through its activities has reduced the malaria incidence from 85 per cent to 5 per cent in the area where it operated. In many countries, including India, teams furnished by the Scandinavian Red Cross Societies under the ægis of UNICEF and WHO have been carrying out an extensive programme of B.C.G. vaccination for the control of tuberculosis. This simple measure had been proven to reduce the incidence of new cases of tuberculosis by about 80 per cent. The governments of Poland, UNICEF, and WHO carried out with penicillin the first nation-wide mass attack on syphilis in history with striking results. The experience has provided information as to effective means of combating similar situations in other countries. In about 10 months, 43,000 cases of syphilis and 27,000 of gonorrhœa were found and treated with penicillin as a result of mass testing.