



sation as if a cord were tightly tied round the knee joint ; the hand could with some difficulty be forcibly opened out, and the patient could to a certain extent do this himself with his other hand, but immediately the aid was withdrawn the hand recontracted into its previous form.

There was no ptosis or paralysis of other cranial nerves. He had a hesitating manner of speech with a slight stammer which he did not remember before. Sexual power and desire were diminished. The only objective symptom of syphilis was orchitis (of the left side more especially), testicular sensation had disappeared, the glands were oblong in shape, both were affected, but the right very slightly.

The patient was placed under the influence of mercury (the weather being cold) in combination with Iodide of Potassium, and in about a fortnight marked improvement was noticed, and with the return of testicular sensation ; in fact there was some pain or rather tenderness, and in about three weeks thereafter he was discharged perfectly cured.

## HEMP (GANJA) SMOKING IN TETANUS ON A NEW PRINCIPLE.

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I propose to give abstracts of five cases of Traumatic Tetanus successively admitted into the N. S Hospital, all of which recovered under the effect of Ganja smoking.

Ganja smoking in tetanus has been known to the profession from a long time, but its effect was thought to be uncertain, and, in some cases, quite worthless. This I attribute to the following causes :—

1st.—The tincture of the Indian hemp being a preparation of Ganja, some practitioners used it by the stomach rather than the fumes of the dried leaves by the lungs ; and the result invariably was unsatisfactory. The same may be said of opium and chloroform.

The effect of Opium (Golee) smoking is instantaneous, and more lasting than that of opium eating. Similarly chloroform acts faster, and longer by inhalation than when taken by the stomach.

2nd.—When the drug is used as an auxiliary, or secondary to some other potent drug, of known efficacy, its effect is either unnoticed or a proper trial is not given to it.

3rd.—When Ganja smoking is ordered for a patient 3 or 4 times a day, or every 3 or 4 hours, it generally fails to produce the desired effect, because in most of these cases, when the effect of the drug wears away, the patient suffers the torture of repeated fresh attacks of clonic spasms, before the time for administering a fresh dose of the drug arrives.

The new principle on which I have administered it in these five cases is :—An attendant keeps a smoking pipe ready near the patient charged with, say, 15 grains of dried Ganja leaves alone, or mixed with twice as much dried tobacco leaves, mashed together, and then watches the patient's movements : on the reappearance of a clonic spasm, he is made to smoke the pipe, until the leaves are burnt to ashes, on which the muscles of

the body instantly relax, the patient shuts his eyes, and apparently falls asleep. The attendant again charges the pipe with dried Ganja leaves, and watches the patient for the advent of the next spasm to make him smoke the Ganja again. In this way the drug is administered day and night uninterruptedly, during which the irritation of the nervous system slowly, but steadily, yields to the effect of the drug. The longest time which the drug takes to cure the disease has been observed to be 1½ month, and the shortest 7 days.

The only auxiliary medicine that may be needed in the course of the treatment, is an occasional dose of purgative mixture by the mouth or enema by the rectum to relieve constipation. In one case, a dose of hydrated chloral was required to be given at night for sleep.

Milk and soup are the only nutriments which the patient can, or should take, until he is able to masticate or swallow solid food, without giving occasion to fresh attacks of clonic spasms.

Of the five cases, the last is a wonderful case of recovery from acute traumatic tetanus, which supervened on the fourth day after the removal of a mortified arm.

Calabar bean, belladonna, opium, hydrated chloral, and chloroform are, I believe, the other reputed medicines for tetanus, but in the way they can be administered and the quantity required for the desired effect, they are either dangerous to life in heavy doses, or inefficacious in small doses. Hence, unless the doctor himself takes the duties of the patient's attendant, and himself gives the medicine in effective doses just when needed, the patient scarcely derives any lasting benefit from their use.

Such uncertainty, however, does not attend the use of Ganja smoking, the patient himself having to smoke it till he goes to sleep, with complete relaxation of his muscular system, its use is a sort of self-regulating process, and the attendant at once knows when enough has been given ; again on the recurrence of the spasm he also knows that the time has arrived for giving another dose.

Unfortunately the drug cannot be used at all in the way directed, in case of young children, who either know not or cannot be made to smoke it, or will refuse to inhale it as often as requested or required. Hence it is of no value in tetanus or trismus of new-born infants, and thus a large class of sufferers of tender age fall victims to this very fatal disease. Until some contrivance is hereafter invented to make them inhale the smoke of this valuable drug along with the air they breathe, it will remain untried among this class of patients.

I shall here give an abstract of the five cases successively treated and cured by Ganja smoking :—

(1). Gopal, an Up-country Hindu of 30 years age, was admitted on the 18th June, 1877. Fifteen days ago a bale of jute fell on the lower part of his abdomen. Tetanus supervened on the fifth day. The clonic spasms were very severe, opisthotonog coming on every four or five minutes, and the patient screaming with agony on each occasion.

Hydrated chloral, Bromide of Potas., Chloroform, &c., were tried without avail. Lastly he was put on Ganja smoking on the 24th June, and discharged cured on the 7th August 1877, *i. e.*, after 1½ month's treatment.