

NOTES ON NATIVE REMEDIES —

NO. 1. THE CHAULMOOGRA

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WITH AN INTRODUCTION

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Chaulmoogra as a remedy for leprosy was first brought to the notice of western practitioners in India by F. J. Mouat, of the Bengal Medical Service, in a paper the title of which appears above, and which was published in 1854 in the *Indian Annals of Medical Science*, volume 1, pp. 646-652. A photostat copy of the original paper was obtained from the library of the Royal Society of Medicine, London. As the paper is of great historical interest to leprologists, extracts from it are here reproduced.

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Some years since, when holding the office of Professor of *Materia Medica* in the Bengal Medical College, I turned my attention to the investigation of Native remedies. I collected a large number of specimens of the Indian *Materia Medica* from all parts of Hindustan, and several examples of the indigenous drugs used in China and the Straits Settlements. At that time I had no wards at my disposal in which to test the reputed virtues of the remedies used by Native practitioners; and the increase of official occupation afforded by the rapid spread of education in Bengal, left me no leisure to accomplish my purpose.

Recently, the subject has again attracted my attention, and although I have as yet been unable to devote much time or consideration to it, I hope, hereafter, to be able to carry out a systematic series of observations in a direction of which all acknowledge the interest and importance.

It is with considerable reluctance that I venture to submit for the consideration of the profession in India, a few remarks upon the Chaulmoogra, as the opportunities which I have hitherto had of employing it are too few and restricted to enable me to recommend it with the confidence that I could wish. Its success was, however, so remarkable and indisputable in one well marked case of the worst form of leprosy, that I venture to hope an extended application of it to that most loathsome and intractable of diseases, may prove so successful, as to secure the general introduction of the remedy.

It appears first to have been described by Roxburgh, in the *Flora India*, under the names of Chaulmoogra Odorata.

The following is the account of it given by that excellent and accurate observer:

Chaulmoogra and Petarkura, are the names of this tree, and of the drug, hereafter mentioned, which it furnishes. It is indigenous in the Sylhet district, and grows to a large size, equalling the largest Mango trees, and when full grown may be compared to the Maple or Sycamore, *Acer Pseudo-platanus*. It blossoms in April and May, and the seed ripens about the close of the year. When the fruit is gathered, the seed is carefully taken out, dried, and sold to the Native dealers in drugs at about five rupees the maund of eighty-four pounds.

The seeds are employed by the Natives in the cure of cutaneous diseases. When freed from the integuments, they are beat up with clarified butter into a soft mass, and in this state applied thrice a day to the parts affected.

In the last edition (3rd 1853 Pp. 323-24) of Lindley's *Vegetable Kingdom*, it is placed in order cix. PANGIACEAE, which are thus described:—

Trees.—Leaves alternate, stalked, entire, or somewhat lobed. Flowers axillary, solitary, or fascicled or in few flowered racemes. ♂ ♀

Sepals 5, rarely 2, 3, or 4. Petals 5, rarely 6. Scales as many, opposite the petals, ♂ Stamens 5 or 00; not a rudiment of ♀. ♀ sterile stamens equal in number to the petals, rarely more. Ovary free, 1-celled; ovules 00, attached to 2-6, parietal placentae. Capsules succulent, indehiscent, 1-celled. Seeds 00, large; albumen abundant, oily; embryo nearly as large as the albumen; radicle protruded; cotyledons generally leafy and veined.—Bennett.

What the distinction is between these plants and Papayads, except that the last are monopetalous, and have no fancial scales in the ♀ flowers, it is hard to say. Mr. Bennett throws no light upon the matter, and I am unable to supply any.

The species are found in the hotter parts of India. All are poisonous plants. The seeds of *Gynocardia Odorata* are employed extensively by the Natives of India in the cure of cutaneous disorders. When freed from the integuments, they are beaten up with clarified butter, into a soft mass, and in this state applied thrice a day to the parts affected.

The seeds yield by expression a bland fixed oil, with a peculiar and slightly unpleasant smell and taste, with the faintest possible after flavour of the bitter almond. The oil procured from the bazars is invariably impure, but I have not ascertained with what other matters it is adulterated. It appears to have been long known to, and prized by the Natives in the treatment of leprosy, and few of the faquirs* travelling about the country are unacquainted with its properties. I was first informed of its value by Mr. Jones, the Headmaster of the Hindoo College, a gentleman of eminent acquirements, who brought it to the notice of other practitioners in this city, and at whose recommendation it was tried in the Leper Asylum, with a favourable result.

CASE 1. On the 6th of July last, an unfortunate Creole of Bourbon, who had long been an inmate of the Leper Asylum, was picked up in the streets in a state of insensibility, and brought by the Police to the Medical College Hospital. Upon admission to my wards he was found to be labouring under the effects of alcohol. Signs of delirium tremens soon set in, and for some days he suffered from an aggravated attack of that disease. The irritability of stomach was so great as to be overcome with the greatest difficulty, and his violence was at times so uncontrollable as to need the restraint of the straight waistcoat. All this yielded to the usual treatment, when the man was found to be a loathsome leper. His feet were bound up with filthy rags, his body exhaled an extremely offensive odour, and he was nearly reduced to a skeleton, so great was his emaciation.

His body was covered with livid patches; the toes of the left foot were without nails, and swollen at the extremities. Upon the sole of this foot, there were three large, ragged, excavated ulcers, with hardened livid edges, and an offensive sanio-perulent discharge. One of them near the heel was of the size of a rupee, had destroyed the skin, fascia, and muscles and exposed the bones beneath them.

There was a similar ulcer on the sole of the right foot and on the dorsum of both feet were excoriations of a leprous character. He was labouring under diarrhoea and great general debility.

After cleaning the surface of the ulcers, I dressed them every day with the oil of Chaulmoogra, and gave him internally a pill of the seed beaten into a pulp, six grains, three times daily.

For nearly a fortnight there was no perceptible amendments, but after this the progress of the cure was rapid. The ulcers healed by healthy granulation, the livid spots gradually disappeared, the general health of the patient improved, and he declared that he was better than he had been for some years

* Religious mendicants.—J. W. T.

previously. He left the Hospital clandestinely on the 10th of September, 1853, and I have not since heard of him.¹

Upon enquiring into his history, I found that he had been for nearly eighteen months an inmate of the Leper Asylum.

It is manifestly impossible to attempt to generalise from a single case, or to ascertain in the instance above recorded, how much of the improvement was due to the regularity and nourishing diet of the Hospital, and what proportion of the cure may fairly be assigned to the remedy. The result is, I venture to believe, sufficiently encouraging to justify a further trial of the Chaulmoogra in leprosy.

The remedy requires much more extended employment before any sound judgment can be framed of its *modus operandi*, and probable value. My object in publishing these crude notes is to direct the attention of the profession to it, as a cheap, readily procurable, and it may be efficient agent in the treatment of a large, and not unimportant class of cases met with in all Indian Hospitals.

I have sent a considerable quantity of it for trial in leprosy at the Kum-le-Faw Hospital, near Canton, and Mr. Piddington has despatched some of it to the Mauritius, also for use in the same disease. I hope, therefore, that the experience of others may, ere long, be made known to the profession.

With regard to the exhibition of the remedy, it may be taken in the form of pill, or the seed itself, stripped of the integument, may be administered. Six grains in the former case, or three seeds in the latter, may be given daily, and the dose may gradually be increased to three or four times that amount. In large quantity, however, it is apt to disagree, causing nausea and irritability of stomach. A more elegant method of administering it would be in the form of the oil, beginning with probably five or six minim doses, and gradually increasing the amount. I have no personal experience of the employment internally of the oil.

Native practitioners direct their patients while taking the Chaulmoogra, to avoid all salt-meats, acids, spices, and sweetmeats, but to aid its operation with butter, ghee and oily articles of diet. It would be well to bear this in mind, and to regulate carefully the diet of all subjected to the use of Chaulmoogra.

¹ Since the above was written, I am informed that the man returned to the Leper Asylum, that his general health is good, and that the disease has not advanced.