

681

THE ANTISEPTIC

1923

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The Antiseptic

A Monthly Medical Journal

EDITED BY
U. RAMA RAU, M. L. C.



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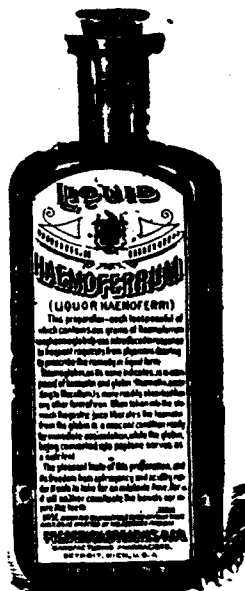
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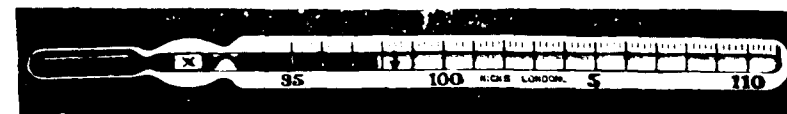
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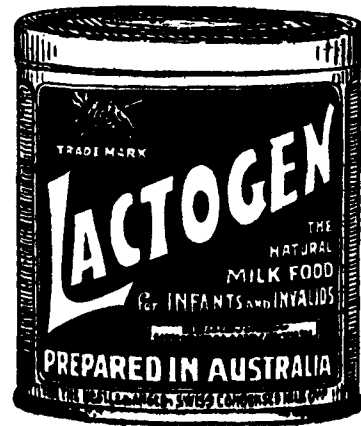
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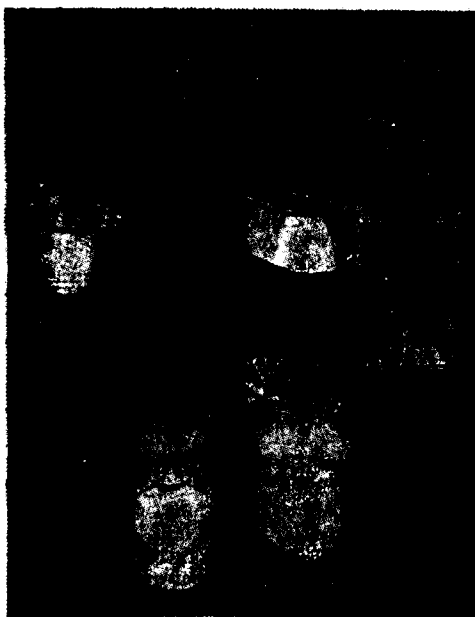


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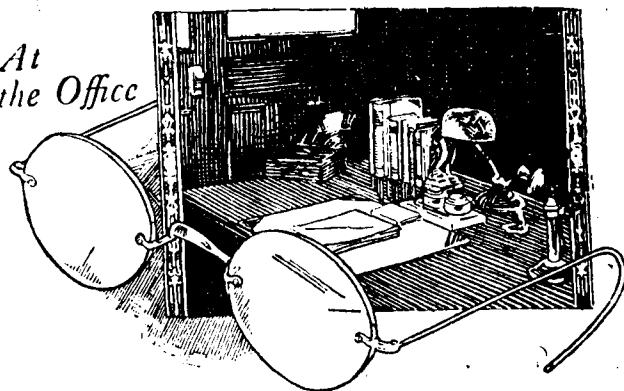
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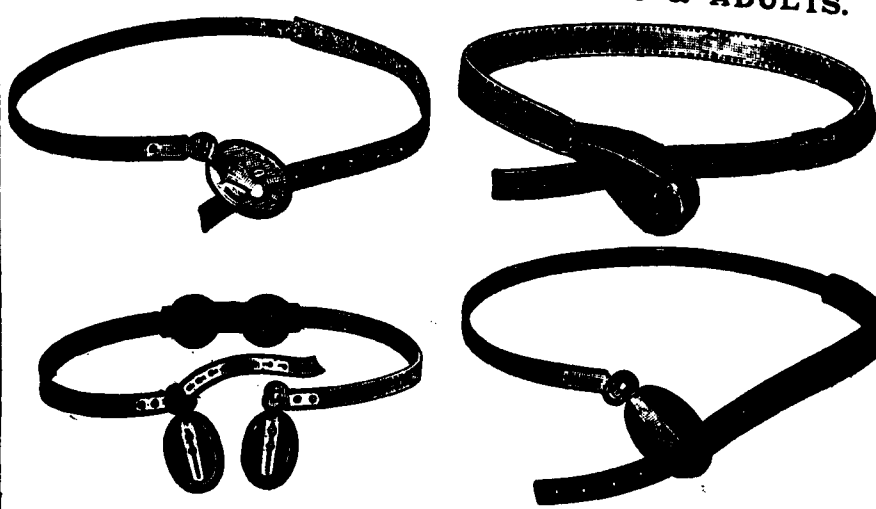
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VOL. XX }
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ORIGINAL ARTICLES.

CHAULMOOGRA OIL.

A monograph on its use in the treatment of leprosy as explained in Ayurveda.

By

J. C. GHOSH, B.Sc., F.C.S.

Leprosy in Ayurveda is known as *Kushtha*. The latter term, however, is of wide meaning, including as it does every form of skin disease. Eighteen varieties, according to general characteristics, are mentioned. Of these at least eight are not classed as leprosy in western science, but as skin diseases under the names of ring-worm, eczema, scabies, etc. The remaining ten varieties perhaps correspond to real leprosy whether tubercular, anæsthetic, or of a mixed form. These varieties, their characteristics and the treatment prescribed in *Ayurveda*, so far as could be gathered from a certain number of standard and current Sanskrit books, are briefly tabulated under para 4 of this note. There are several Sanskrit books on medicine which are not readily available and if the present information proved useful, it would afford an incentive for a further research into ancient Sanskrit learning and for the rare books to be looked into.

2. One of the standard Sanskrit books consulted for the purpose of this note is *Susruta*, the well-known ancient authority on Hindu medicine and surgery. In the 13th chapter of this book under "Treatment of diseases" there is mention of a plant called *Tuvaraka* in Sanskrit, but *Chaulmoogra* in Hindustani as well as in Persian. The passages which occur in *Susruta* in regard to *Tuvaraka* might be translated as follows :—

"The 'Tuvaraka' plants which grow on the western seacoast of India are constantly tossed about by the breeze arising from the waves of the sea. The seeds of these plants should be carefully collected in the rainy season while they ripen. They have to be subsequently dried, decorticated and pounded. The oil should be pressed out of these seeds in a mill just in the same way as sesamum oil, or squeezed out of a press bag similar to that used in the case of *Kusambha* flowers,

It should be boiled over a fire to get its inherent moisture completely evaporated and then taken down from the fire and kept in a pitcher and buried for a fortnight in a heap of well-dried cow-dung. The patient in the meantime should be duly anointed, fomented and treated with cleansing remedies (*i. e.*, emetics and purgatives). He should first wait for a fortnight after the administration of the aforesaid measures and then for a further period of two days and on the next morning he should drink a potion of the oil in adequate doses (two tolas = 4/5 oz) under the auspices of favourable astral combinations in the lighted fortnight of the month. He should be made to recite, at the time of his taking the fourth dose, a *mantra* which runs as follows :—

‘Cleansest and purifiest, O Thou potent essence of seed marrow, all the essential principles of my vital organisms. The diety who knows no decay and suffers no change and who weilds a discus, a mace and a conch-shell in his arms, commands thee on that behalf.’

“The bad humours, etc., in both the upper and the lower parts of a patient’s body are cleansed with the help of this oil (which should be given to the patient in the morning) while a cold gruel, unseasoned with salt and not mixed with any emollient substance (oil or clarified butter) should be given to him in the afternoon. The treatment should be repeated for five days in succession and the patient should avoid anger, etc., and live on lentil soup and boiled rice for a fortnight. A five days’ use of this oil would ensure the cure of every type of leprosy and diabetes.

“The above ‘Tugaraka’ oil should be boiled and prepared with a decoction of catechu three times the weight of the oil and taken internally with patience for a month. The patient should also anoint his body with the same and then take his meals in the prescribed form. A leprosy patient as well as a diabetic one whose voice is hoarse and eyes red and who has worm-eaten and emaciated limbs should be given this oil at once to drink and to rub it over his body. Regular potions of Tugaraka oil taken with honey and clarified butter and with a decoction of catechu and accompanied by a diet consisting of the soup of wild fowls would enable the user to live for a period of 200 years. A use of this oil as errhines for a period of fifty consecutive days would enable the user to witness 300 years on earth in the full enjoyment of bodily vigour and youthful glow of complexion as well as with a very powerful retentive memory.

“A regular use (in an adequate dose) of the kernel of Tugaraka cleanses the system of the patient and affords a most potent remedy in cases of leprosy and diabetes.”

3. According to the exhaustive and conclusive researches of Dr. Power and his colleagues of the Wellcome Chemical Research Laboratories, London, Tugaraka (*Hydnocarpus** *Wightiana*) which is a native of Malabar coast in South India, yields an oil closely resembling, both in physical characters and chemical composition, the oil obtained from *Taraktogenos Kurzii*, but widely differing from *Gynocardia Odorata* oil as shown below:—

* Unfortunately *Hydnocarpus* oil used to be regarded as “False Chaulmoogra” till recently. Prior to the issue of this pamphlet no attempt was made to show that *Hydnocarpus* oil is real *Chaulmoogra*.

Oils.	Physical Characters.	Chemical Composition.
I. Chaulmoogra oil from <i>Hydnocarpus Wightiana</i> . (Susruta.)	Soft solid at 15° c.; optically active; M. P. 22-23° c.; S. G. O. 958.	Chaulmoogric acid and hydnocarpic acid of general formula $C_nH_{2n-4}O_2$, both acids being crystalline and optically active, also a relatively small proportion of palmitic acid.
II. Chaulmoogra oil from <i>Taraktogenos Kurzii</i> . (B. P. 1914.)	Soft solid at 15° c.; optically active; M.	

Chief varieties of leprosy according to Ayurvedic classification.	Characteristics.	Ayurvedic Treatment.
1. Aurumvara.	Nodules resembling fruits of <i>Ficus Glomerata</i> both in size and colour; painful and accompanied by a sense of burning and itching. Hairs on nodules assume a tawny colour. (Curable.)	(a) Medicines for internal use. Chaulmoogra oil; oil of Gurjan balsam (<i>Dipterocarpus Turbinatus</i>) mixed with lime water; medicated ghee (clarified butter); confections; pills; pulvis neem (<i>Melia Azadirachta</i>) flower, fruit, leaf, bark and root; tincture catechu Co, (Ayurvedic).
2. Pundarika.	In circular spots, lamellar, somewhat recalling petals of <i>Nymphaea Lotus</i> ; colour whitish-red except at the centre which is whitish brick-red. (Curable.)	(b) Medicines for external use. Chaulmoogra oil; oil of Gurjan balsam mixed with lime water as above; chaulmoogra ointment; liniments; plasters; medicated oils; dusting powder.
3. Rishya-jihva.	Eruptions shaped as the deer's tongue; coarse and rough to the touch; painful; red at the edges and dark at the centre. (Curable.)	Under (a) and (b) over 80 preparations are described in the books consulted. These preparations comprise more than a hundred vegetable drugs, also a few mineral and animal substances.
4. Kapala.	In partly dark and partly tile-red patches; dry and rough to the touch; accompanied by pain recalling the pricks of innumerable needles; epidermis thin.	(l) Vegetable drugs. Of so many drugs mentioned, the following appear to be important :—

(Curable with difficulty).

Note : This idea in Ayurveda as to the curability or otherwise of leprosy appears to be that as long as the disease is confined to the skin, to food secretions* before their conversion into blood, or to blood itself, cure is possible. Even when the disease advances so far as to affect the fat,† the progress may be arrested and cure effected. But when the malady affects the bones and the marrow and is accompanied by development of worms in ulcers, by thirst, by a feeling of heat and burning and by loss of appetite, cure is impossible. Finally death ensues when eruptions begin to burst, discharging putrid matter, followed by redness of eyes and hoarseness of voice.

In white and red eruptive patches; always moist; oily; elevated, circular and confluent.

(Hardly curable).

Eruptions resembling the fruits of *Abrus precatorius* dark at the centre

†Here also the meaning is not clear.

*The Sanskrit word translated here is *rasa* which perhaps refers to chyle or to secreting glands and intestines.

Chaulmoogra.

1. *Chaulmoogra* which is called *Tuvaraka* in Sanskrit, as already explained, is also known in that language by another name (*Kushtha Baire*) which is very significant and which means literally—a foe to leprosy. From the latter designation combined with what has already been said about this drug, it appears to occupy the chief place in the treatment of leprosy.

Chief varieties of leprosy according to Ayurvedic classification.	Characteristics.	Ayurvedic Treatment.
	and red elsewhere, accompanied by smarting pain; ripen and suppurate. (Incurable.)	the Ayurvedic belief in the efficacy of catechu as leprosy cure. 5. <i>Myrabolan</i> —This too contains tannin and the remarks above apply to it as well. <i>Aromatic balsam group.</i> 6. <i>Guggul</i> (<i>Balsamodendron Mukul</i>) is highly spoken of in Ayurveda. Its efficacy, if any, may be due to the volatile oil it contains. Similar balsams of Peru, Tolu and <i>Styrax</i> contain cinnamoin and cinnamic acid and on investigation <i>Guggul</i> may also be found to possess the same. Cinnamon oil and cinnamates are used as internal antiseptics and the use of <i>Guggul</i> in Ayurveda suggests the trial of some soluble cinnamate hypodermically in the treatment of leprosy. 7. <i>Gurjan</i> Balsam (<i>Dipterocarpus turbinatus</i>) resembles copaiiba in odour and taste. In Moore's Family Medicine, <i>Gurjan</i> oil with lime water is recommended for leprosy. This recommendation is apparently based on Ayurvedic information. (ii) <i>Mineral drugs.</i> 1. Arsenium Sulphide (red) $As_2 S_3$. 2. Arsenious Sulphide (yellow) $As_2 S_2$. 3. Mercury (purified) and Sulphur (purified) mixed by
Minor Varieties.	Eruptions occupying a large space and having a fish-scale appearance; do not sweat.	
7. <i>Ekakushtha</i> .		
8. <i>Charmakushtha</i> .	Eruptive patches as rough as the skin of an elephant; dry; dark and thick.	
9. <i>Charmadala</i> .	Eruptions of a reddish hue, accompanied by itching, also by pain as intense as that of piercing	

with a pile, covered with large pimples incapable of being touched without giving severe pain and in which the flesh becomes putrid and falls off.	trituration. 4. Copper. 5. Iron. (iii) <i>Animal excreta.</i> Cow's urine strongly recommended for internal as well as for external use in leprosy. (iv) <i>Other remedies.</i> Alkalies; five cleansing methods (emetics; purgatives; enema; sternutation; fomentation). <i>Conclusions.</i> 1. Use Chaulmoogra oil from seeds of <i>Taraktogenos Kurzii</i> or <i>Hydnocarpus Wightiana</i> . 2. Use Antileprol, a purified form of Chaulmoogra oil. (This could be made locally). 3. Use a soluble salt of Chaulmoogric acid (sodium Chaulmoograte or magnesium Chaulmoograte). 4. In conjunction with Chaulmoogric treatment, one or more of the following may be tried internally, externally or hypodermically:— (a) Pyrogallol Oxide (pyraloxin); (b) Neem oil; (c) Sodium cinnamate; (d) Nuclein in an alkaline solution; (e) Donovan's solution; Fowler's solution; (f) <i>Gurjan</i> oil made into an emulsion with lime water; (g) Cow's urine; (h) an ointment made with pyraloxin—3 parts, neem oil—3 parts, zinc Chaulmoograte—4 parts and prepared suet—90 parts.
10. <i>Kitim</i> .	Eruptions of a dark colour, dry and rough to the touch as if ulcerated.

