

In conclusion, I would just like to add that some of our patients have had slight fever for a few days after the injection accompanied by more or less pain or discomfort, but in no case has there been anything like abscess formation or after-trouble of any kind.

In one case, on the day following the operation the urine was coloured red by the presence of blood. This, however, disappeared from the urine before night. Probably the ureter had been accidentally punctured, but no ill-effect resulted.

#### TREATMENT OF SMALL-POX BY TINCTURE OF IODINE.

BY A. G. NEWELL, M.D., D.Ph.,

*Health Officer, Lahore.*

SINCE Iodine has been proved as a useful local disinfectant, it occurred to me it should be of value as a paint to disinfect the skin in small-pox and therefore lessen the aerial dissemination of infectious epithelial debris. It necessarily follows the earlier this is done the greater should be its value. I accordingly determined to use it in the treatment of small-pox as a local paint on the more exposed parts, and so began the trial by its application to the forehead, chin, neck and the back of the hands. Its use, however, proved it to be of much greater value than the object for which I applied it. Using it early in confluent cases I found that it materially affected the development of the pox and prevented the "pitting" of small-pox which is so horrible a result in confluent cases. It is because it has proved itself so valuable an agent in the prevention and lessening of "pitting" (according to the period of its application—the earlier the better), that I think I am justified in writing this early note to enable my brother practitioners to use a valuable therapeutical agent which will modify the disease and save his patient from disfigurement. I have been too busy to accompany this note with details of cases, nor could I rely on the hospital assistant at my disposal to make out the temperature charts, but the results have proved satisfactory, and I think are worthy of record in this new treatment of small-pox. I used the ordinary B. P. tincture of iodine and so far have limited its use to the above-mentioned parts. The application can be applied 2 or 3 times a day for a few days only and then totally discarded. The coloured scabs and epithelium all come away and, in cases treated early, leave no trace of a scar even in severe confluent cases. Both Indian and European cases gave success.

The following advantages may, in my opinion, be claimed for this treatment: (1) Lessening and prevention (if applied early) of "pitting." (2) Modification of the disease. (3) Lessening

of pain and fever. (4) Disinfection of the parts where it is applied and thereby lessening the chances of aerial infection from epithelial debris. (5) A useful method of lessening the spread of the disease among natives who refuse to go to hospital; as, if one can disinfect the exposed parts, arrangements can be made to disinfect articles of clothing covering the other parts of the body. [Before discharge from hospital my practice has been to have all patients washed or bathed in a carbolic solution.] (6) Lessening of mortality in confluent cases since it follows if the "pox" on exposed parts mentioned can be thus abated there is so much lessening of toxæmia. It seems to me there is further scope in this treatment to see how far the mortality can be reduced by alternate applications of the iodine to different parts of the body so that all parts affected by the eruption can be so treated. I intend to try this in the next cold weather when I expect some more cases for treatment. At present the epidemic has ceased, and I am now writing this note while on short leave.

#### AN OUTBREAK OF URTICARIA EPIDEMICA DUE TO MUCUNA PRURIENS, THE COW-ITCH PLANT.

BY H. STOTT, M.B.,

CAPTAIN, I.M.S.,

*Mandalay.*

THE sudden occurrence of an outbreak of urticaria, amongst a defined group of individuals, which was apparently due to the poison of *Mucuna Pruriens*, the cow-itch plant, a member of the vegetable kingdom, one does not find incriminated in the everyday text-books of medicine. It would therefore seem to be worthy of record.

The facts are briefly these—

##### (a) *History of Outbreak.*

On Saturday, 21st October 1911, a Double Company of a Punjabi Regiment went out for field training in the direction of Mandalay Hill. Their work necessitated them frequently assuming the prone and upright positions and of much manœuvring in the long grass. It was a dry day and the sepoys did not get wet through with rain or dew, but, on the other hand, their work was hard and they perspired freely.

On their return after some three hours' absence the men changed their khaki for mufti, at this time many of them noticed some itching sensations, which were soon followed by a most definite typical urticarial eruption.

##### (b) *The Rash.*

The wheals varied in size from a pin's head to a Filbert nut in different cases—and were diffused in some over the ventral aspect of the body only, in others indiscriminately over all parts of the trunk, whilst still in others the limbs

were also affected. The rash was always more obvious at the sides and in front of the abdomen where the waist belt comes, and perspiration was free. It lasted throughout Sunday and Monday, by which time it had commenced to disappear—and was completely absent on Tuesday, the end of the third day.

No other symptoms at all were associated with the occurrence of this rash, no fever, pains, malaise, colic, constipation or diarrhoea were complained of or noticed.

Save in this Double Company, no cases of urticaria were occurring in the regiment, nor indeed in the station itself.

(c) *The Percentage affected.*

The Double Company went out 138 strong (71 G. Co. and 67 H. Co.). An inspection of these men shewed that 39 (15. G. and 24. H.) or 28·3 % subsequently suffered with this urticarial eruption.

AS TO THE CAUSE OF THE OUTBREAK.

(i) Apparently there was no reason to suspect any *gastro-intestinal auto-intoxication*, none of the men complained of any alimentary trouble whatsoever.

(ii) As to their *food*—this did not differ in any way from the usual Government ration issued universally to the station, together with the extras the men themselves purchased in the Regimental Bunia shops, which were as freely patronized by the remainder of the regiment.

None of the sepoy had eaten any fish at all, their particular meal on the Saturday morning happened to consist of chappaties, boiled rice with dal, vegetable curry and milk.

(iii) As to internally administered *drugs*, G. Company were taking and H. Company were not taking prophylactic doses of quinine. No other drug was being given to these men.

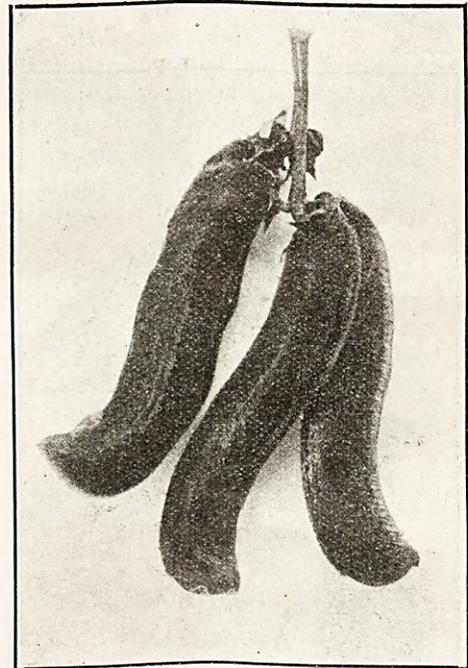
(iv) As to *insect bites and stings*, there was no evidence to support any such theory as local irritation from ants, fleas, bugs, mosquitoes, wasps or other insects—the men had seen none of these nor were any signs of them detected on examining these cases or their clothing.

(v) Two days after the outbreak the spot was visited in hopes of finding some explanation for the epidemic, and especially to inquire and search for the *procession caterpillar* (species *Cnethocampa*) noted by Professor Sir William Osler as being responsible for outbreaks of Urticaria Epidemica. No signs of these could, however, be detected and no news of them obtained, nor indeed of any such possible toxic laden member of the animal kingdom.

(vi) *A poisonous plant.*—But, on the other hand, around the foot of Mandalay Hill, where the men had been was growing over bushes, shrubs and trees, a creeper, the fruit pod of

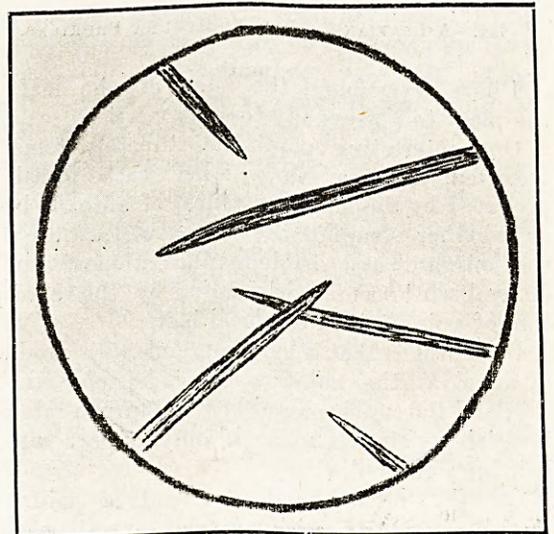
which was covered with innumerable, exceedingly slender, brittle, and easily detachable hairs, which readily stick to the skin and produce an intolerable itching.

It is not necessary to touch these pods for the urticarial wheals to become manifest—the air carries the pod hairs with the greatest ease to any unfortunate passer-by—so much so that the Burman to whom the plant is well-known will make what for him is quite a detour so as not to pass near a pod-laden creeper-covered tree.



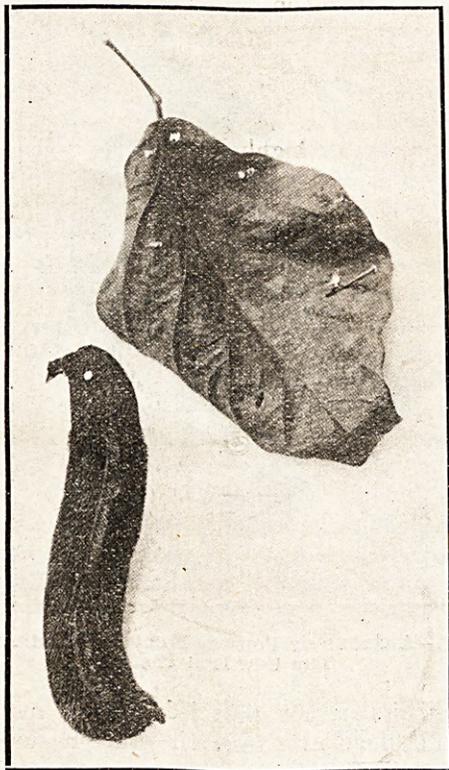
I.—A GROUP OF PODS OF *MUCUNA PRURIENS*, THE COW-ITCH PLANT.

The hairs are not provided at their root with the bulb like elastic reservoir—the pressure from



II.—POD HAIRS (MAGNIFIED), SHEWING THE UNBARBED, BULBLESS ENDS.

which, so botanists tell us, injects the toxin of the common stinging nettle—so that even if the hairs of *Mucuna Pruriens* run into the skin no ill or woe will result provided they are pulled out without fracture—an operation comparatively easy as the hair under the microscope is seen to be “unbarbed” unlike other such weapons of many of the members of the vegetable kingdom. This advantage is, however, minimised to some extent by their great brittleness; and the slightest rub consequent on the irritation of the initial prick is sufficient to rupture the hair and expel its toxic contents.



III. —A LEAF AND A POD OF *MUCUNA PRURIENS*.

I have never found the hairs of the leaf of the plant to possess any toxic properties.

One interesting point unfortunately remains unsolved, *viz.*, as to whether each wheal is produced by the local entrance of a toxic hair, or whether some of the wheals at least are not the outward and visible manifestation of a mild generalized toxæmia, originating by the absorption of poisons from the local hairs.

Certain it is that a hair can and will produce a wheal at the point where it has pierced the skin and fractured, moreover the Burman almost invariably states that wheals only appear where hair have entered.

On the other hand, a friend of mine, a British sportsman with much experience of camp life and this parasitic plant, states that usually the rash only appears at those spots where

contact with the pod hairs is likely to have occurred; but that if one happens to be heated and perhaps in a copious sweat when the plant is met, then as often as not the rash not only comes out locally but also generally over covered parts of the body.

With this latter view my personal sympathies are—it affords an easy explanation of the distribution of the rash in our miniature epidemics—and finds a ready support from sound physiological principles.

Apparently the susceptibility of different individuals to the toxic effects of the pod-hairs varies as widely as those of other intoxications.

#### WIDE DISTRIBUTION OF THE PLANT.

The plant is known amongst the Burmese in Mandalay as the “GYWE-NYAI-THI” (*i.e.*, plant with the itching fruit) and is universally shunned by them.

It is apparently identical with the Urdu-named ‘KIWACH,’ the Tamil ‘KANCHKURI,’ the ‘*MUCUNA PRURIENS*’ of Botanists, and the cow-itch plant of European fame. It would thus seem to be very generally widespread in nature.

#### SOME NOTES ON THE PLANT.

As an epidemic of urticaria due to the cow-itch plant is rather a pathological curiosity and as the plant itself has apparently a somewhat definite place in Indian native medicine, perhaps a few notes, botanical and others, may be interesting.

The plant itself usually springs up in the rains and dies down after flowering in the following cold weather. It grows long clusters of dark purple flowers and legumes, at first green, then golden brown and later a rich deep red and finally a dirty yellow, as it successively ripens and dies away. These pods are covered with irritant velvety hairs which shed themselves freely. It is a climbing annual of the Pea family (*LEGUMINOSÆ*)—and is apparently found throughout the tropics.

#### USE IN NATIVE MEDICINE.

Different parts of the cow-itch plant are used in Native and were once used in European medicine.

(i) *The hairs of the Pods*—are used as a vermifuge. The pods themselves are directed to be dipped into treacle or honey and the hairs scraped therefrom. Dose ʒii to ʒiii. They have also been used in Indian History for poisoning wells.

(ii) *The Seeds*—from the earliest of times have been accredited with powerful aphrodisiac properties by native physicians.

(iii) *The Root* is said to be a useful tonic for the nervous system, and is also given by the Tamil doctors for cholera.

(iv) *The tender young pods* are cooked and taken as a vegetable, though for this purpose a special variety is cultivated (*MUCUNA UTILIS*), especially around Mandalay and in the Chin hills.

OPIUM CURES, "COMBRETUM  
SUNDAICUM" AND  
"ANTIPAV."

By W. C. BROOKES,

*Civil Surgeon, Kindat.*

SOME time in 1910 while in charge of the Myitkyina District bordering on China, I was provided with a supply of the vegetable Combretum Sundaicum through the courtesy of Rev. George A. Wilson, 181, Queen Victoria Street, London, Secretary, Anti-Opium League, with the object of giving it a trial in curing confirmed cases of the opium habit. As there were a number of Chinese in the district addicted to opium, I was able to try the drug in 30 cases, securing 90 per cent. of successes,—patients declaring after the course of treatment that they had lost all desire for opium. Most of the unsuccessful cases declared they had less desire for opium after going through the course of treatment.

Instructions for preparation and use of the decoction were as follows:—

Place one ounce and a half of the small leaves and twigs of the herb (*Combretum Sundaicum*) in a vessel and cover with plenty of water, put a cover on the vessel, place it on a stove and allow it to simmer for 4 hours and then strain. Replace it on stove without any cover on the vessel and simmer down to a quart. This quantity should be placed in two one-pint bottles, marking them A and B respectively. The medicine should be kept in a cold, dry, dark place and well corked.

In the bottle marked A should be placed the quantity of opium the patient is accustomed to take during 24 hours, and mixture to be then well shaken.

*Dosage.*—The patient should be given 1 ounce out of bottle A several times a day (about 8 doses a day are sufficient); after each dose is drawn off, the bottle marked A should be refilled from bottle B and then well shaken. The patient should continue using the medicine from bottle A in the same way, refilling from bottle B till both supplies are exhausted.

In 1911 the Rev. George A. Wilson very kindly sent me a free sample of 32 ounces of "Antipav," a medication prepared from *Combretum Sundaicum*, put up as a fluid extract in convenient form for administration. (I may here mention that the actual cost of the free sample of 32 ounces of "Antipav" was 32 shillings.

The directions for using "Antipav" in curing the opium or morphia habit are given as follows:—

Use the "Antipav" in doses of half a teaspoonful to one half wineglass of water every two hours.

Reduce the drug taken (opium or morphia) in regular proportion every day after giving the "Antipav" for 24 hours. The rate of diminution must be determined according to the circumstances of the case, and by easy stages until the drug is reduced to *nil*.

Treat any accompanying irritability of stomach, diarrhoea, febleness of pulse or insomnia due to stoppage of accustomed drug; and put the patient on a general tonic after the course of "Antipav" treatment.

*Diet.*—Soup, milk, eggs and anything light until the stomach recovers tone, and avoid anything heavy or highly spiced.

There are fewer Chinese in this locality, and fewer people addicted to the opium habit, and I have consequently had fewer opportunities of experimenting with the new preparation "Antipav." I have, however, tried it in five cases with complete success.

## A Mirror of Hospital Practice.

### SOME INTERESTING CASES.

By C. MILNE,

MAJOR, I.M.S.,

*Civil Surgeon, Mussoorie, U. P.*

THE following medley of cases may prove of some interest to the readers of the *Indian Medical Gazette*. The first five cases are of interest chiefly because in each of them I was fortunate enough to obtain a *post-mortem* examination—if *post-mortems* were the rule rather than the exception, the interest in an ordinary Civil Surgeon's work would be doubled.

*A Case of Dysentery.*—Police constable Amin Khan had been suffering from "dysentery" in his own home for two or three days. Much against his will he was taken to the Police Hospital, Jhansi, on the evening of the 11th February, at 7 o'clock. The Sub-Assistant Surgeon who saw him did not think his case was a serious one, and merely gave him a stimulant: next morning at 3 A.M., he died. There was no reason to suspect foul play, and in fact the body was just about to be removed for burial, when I arrived at the hospital. I had not previously seen a *post-mortem* done on a case of acute dysentery. I asked the Superintendent of Police for permission to make an examination—giving as my