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“COOLIE ITCH.”

BY J. NUMA RAT, M.R.C.S. ENG.,

St. Kitts.

THE accompanying photographs are illustrations of a skin affection popularly known in the West Indies as “Coolie itch”—a name which originated in the general belief that the disease was introduced into the West Indian Islands by indentured Chinese or East Indian labourers called “coolies.”

The photographs are those of an arm and a leg of a West Indian negro, about 35 years old, resident in Basseterre, St. Kitts. His occupation is that of a boatman. He had always been in excellent health, which he has continued to enjoy with the exception of the itching and consequent sleeplessness caused by the skin eruption.

The photograph of the arm represents the disease in its earliest, and that of the leg in its latest stages, the eruption having first appeared on one leg, and thence invaded the rest of the body, the arms being the last portions attacked.

According to the patient's account, he is perfectly ignorant of the source from which he contracted his complaint. Neither his wife nor any of his children have suffered from it; and he has not come in sufficient contact with anyone who might have communicated it to him.

Between two and three months ago he noticed on the outer side of his right leg, about a hand's breadth above the ankle, a crop of papules like those now seen on his arm. These caused considerable

itching. They were followed, after an interval of a few days, by others higher up the leg; and thus the eruption spread gradually to the rest of the same limb, to the other leg, to the abdomen, to the chest, to the back, and lastly to the arms. The hands, the feet, and the head and neck are practically unaffected. The peroneal aspects of the legs were formerly the sites of the most severe pruritus, and the most fully developed form of the eruption. At present the back and the arms are the parts in which the intensest itching is experienced; but in no other region of the body have any patches been observed at all approaching in size those seen on the legs. The itching which accompanies the disease is greatest during the papular stage. It becomes worse when the patient is in bed, or when his body is heated by exertion or by exposure to the sun.

The papules in this case never became vesicular. They have only increased in size circumferentially, the violent scratching provoked by the itching apparently exciting them to more rapid growth. As they developed they lost their acuminate shape, and broadened into wheals of various sizes, which coalescing formed the large patches on the legs. These patches consist of a thick yellowish-white pellicle resting on purple ichorous tissue—apparently granulation tissue—slightly raised above the level of the adjacent skin. On being forcibly detached, the pellicle was found to be irregularly attached to the tissue beneath, so that, after its removal, its under surface presented a honey-combed appearance. The patient (rightly I think) attributes the condition of the large patches on his legs to the amount of scratching which they underwent; for it was in the lower limbs, as already stated, that the intensest pruritus was experienced. By violently scratching one of his legs he once partially removed a large portion of pellicle from one of the patches; but this, on being replaced, adhered as before to the subjacent tissue.

There were neither pustules nor ulcers to be observed about any part of his body.

The eruption was noticeably absent from such parts as the interdigital folds, the wrists, &c., where the *acarus scabiei* chiefly lodges; nor was the *acarus* found in or about the patient's body.

The slate colour of the eruption on the leg is presumably due to the purple tint of the tissue on which the pellicle rests; for, after removing the latter, it appeared yellowish-white. (I am unable to

say whether this peculiar colour of the eruption is frequently observed in the disease. Dr. W. J. Branch, of St. Kitts, who first saw this case and sent it to me for examination, also noticed this peculiarity of colour about the patches on the legs; but his memory would not allow him to say whether it had been absent in his previous cases or whether it had rather escaped his observation.)

Dr. Nicholls, in his report on Yaws, published for the Colonial Government in 1893, gives (page 71) the following account of coolie itch as it is observed in St. Lucia:—“The eruption first appears as a small vesicle which becomes pustular; the yellowish pus then partly dries and forms a moist gamboge-coloured crust. Under the crust the skin ulcerates, and the ulceration spreads and may join other ulcers produced in the same way. On removing the crust, a shallow, dirty ulcer is seen of an irregular shape and with sharply-defined edges. The pustules and ulcers are very painful, and the patients appear to suffer constitutionally from the disease. Adults are more frequently attacked, but many children also suffer from the affection, which appears to have been unknown in St. Lucia until after the arrival of the East Indian immigrants.”

The above account of coolie itch differs so much from the case here reported by me as having occurred in St. Kitts that I was led to make inquiries on the subject of Dr. W. J. Branch of this island, who, in his long residence here, has had a large experience of the skin affection. He informs me that it was unknown in this island until about ten years ago, when it was introduced by East Indian labourers from the neighbouring island of Nevis; that since then it has appeared and disappeared at intervals, as if occurring epidemically; that it is highly contagious; and that he knows an instance in which a coloured nurse communicated it to a white child, from whom it was contracted by both parents. He assured me that in the genuine coolie itch observed by him in St. Kitts there were neither pustules nor ulcers; and that the symptoms in all the cases which he had seen were similar to those of the patient who is the subject of this paper.

There are two diseases which bear a resemblance to coolie itch such as it is described (*loc. cit.*) by Dr. Nicholls—viz., the kra-kra or “craw-craw” of the West Coast of Africa and the “dermatose parasitaire,” a case of which is recorded by Nielly. O’Neil’s account of

kra-kra* states that the eruption in that skin affection is attended by intense pruritus, and consists of papules scattered generally over the trunks and limbs, which, in four days, are transformed first into vesicles and then into pustules. Nielly† noticed in a French lad, whose life had been chiefly passed in a country district in France, and who had never been abroad, a pruriginous eruption characterized by red patches on which papules quickly developed. These papules were soon transformed into vesicles, and the vesicles into pustules, which became encrusted.

It is evident that the above skin affections, while resembling the coolie itch of St. Lucia as reported by Dr. Nicholls, with the exception of the ulceration mentioned by him, are quite unlike the coolie itch of St. Kitts as it is here described. The papules, in the case considered in this paper, never became vesicular or pustular, but slowly broadened into wheals which coalesced and formed the patches of various sizes already mentioned.

In both the kra-kra of O'Neil and the "dermatose parasitaire" of Nielly a filaria-like organism was observed in the papule. A microscopical examination of portions of the patches of the eruption on the leg in the St. Kitts' case revealed no parasite. The papules on the arm were not examined, the patient not having returned for the purpose as requested.

I will not fail to communicate to the *British Journal of Dermatology* the result of further microscopical examinations of the diseased tissues in this skin affection; but meanwhile I trust those who have had sufficient experience in the matter will inform us which are the symptoms which they consider characteristic of genuine coolie itch.

I may add that Dr. Nicholls, though he searched carefully for it in several patients, failed to find the *acarus scabiei* in the cases of coolie itch which came under his observation in St. Lucia.

* *Lancet*, February, 1875 (*vid.* Davidson's "Hygiene and Diseases of Warm Climates," pp. 945 and 946).

† *Arch. de Méd.*, April, 1882; *Arch. de Méd. Nav.* No. 37 (*vid.* ditto and "Traité pratique des Maladies de la Peau," par Louis A. Duhring, traduit par le Dr. Toussaint Barthélemy et le Dr. Adolphe Colson, pp. 799 and 800).