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Medical Matters.

LATHYRISM.

This disease is no newly-discovered affection; in India it has attracted attention from 1857, and lately it has spread to such an extent in the Central Provinces and adjoining native States that a Government inquiry has been instituted for the purpose of solving the ques-

tion of its causation. In a recent number of the British Medical Journal, Major A. G. Hendley, I.M.S., gives an interesting account of its ætiology, symptoms, and history. Scheube gives the best definition of the disease; he says :--- "Lathyrism is a disease of the nature of intoxication with a spastic spinal paralytic course, which is attributable to poisoning with various kinds of the family of Papilionacece lathyrus (chick-pea or common pulse). Dr. Watt, in his "Dictionary of the Economic Products of India," says:—"Lathyrus, a genus of annual or perennial plant of the natural order of Leguminosce, which comprises some 170 species, seven of which are natives of India." Some of these are khesari dall, teora and lakh or lakhori. Only the poorest classes are liable to this disease, as they are forced to subsist on the grain, unmixed or diluted only slightly with other grain. Practically all are field labourers, and the unanimity with which all agree as to the onset of the disease is most striking. A man will say: "I went to sleep perfectly well and very tired after a day's ploughing or other field work in the rain (it is always in the rainy season), and awoke in the morning to find my legs stiff, weak, trembling, and very heavy." This weakness and trembling increases so rapidly that within ten days progression becomes difficult; still the patients have no sense of illness, but sleep well and have unimpaired appetites. Both legs are usually simultaneously affected, first the calves, then the thighs, and soon after this all sexual appetite and power is lost. The gait is very peculiar, the body above the hips sways from side to side, while the feet are lifted with evident difficulty and dragged forward, the toes scratching along or barely clearing the ground. The leg bearing the weight of the body is bent at the knee and trembling, whilst the advancing leg, strongly adduced, is planted unsteadily directly in front of its fellow, the toes reaching the ground first. There is no

wasting, no loss of muscular tone, no true tremors, only trembling of the entire limbs when weight is put on them. Sensation seems quite unaffected, the tendon reflexes are much exaggerated; there is no undue excitability or loss of power in bladder or rectum; the mind is clear, speech natural, pupils normal and reacting naturally to light and accommodation. The urine is of rather high specific gravity, and, in a few cases, there are digestive disturbances. As regards the ætiology of the disease, it is gener-ally conceded now that the paralysis is in some way due to lathyrus poisoning. Other main theories of causation are: (1) That lathyrus eating has nothing to do with it. (2). That if it has, it is only diseased grain which is capable of poisonous effects. (3) That exposure to sun or to some local hot wind is the true cause. (4) That the paralysis is due entirely to cold and damp. (5) Manson has thrown out the suggestion that, like alcoholism and probably beri-beri, the disease may be due to the entrance into the body of a toxin generated by germs whose habitat is outside the body. (6) Lastly, it may be proposed that some organism or parasite is the author of all the mischief. Professor Dunstan of the Indian Institute is now working at this subject. So far investigations and experiments are his inconclusive, but go to show (1) that only certain samples of lathyrus are poisonous; (2) there is some reason to think that the poison is contained in the skin or husk of the seed, but no fungus has been discovered; (3) that poultry are immune. There remain two main points of interest in connection with the causation of lathyrism, namely, its marked preference for males, and its seasonal incidence, not as Major Buchanan advances, "because the granaries are closed in June and the lathyrus grain is only issued to labourers in the rains," but as the natives believe, viz., that lathyrus, whilst it may possibly cause paralysis by itself, ordinarily only predisposes to it, and that exposure to severe wet and cold is required actually to excite the sudden seizure. This explains the attacks in wet weather, and the fact that men are chiefly stricken, as they are more exposed than women. The prognosis of the disease as regards life is favourable, but the paralysis is incurable and treatment is quite futile. It will be seen that research in connection with obscure tropical diseases affords an interesting field of investigation to scientific minds.



