

either taken internally or for bathing purposes. So confident are they of its injurious effects, that they will not admit its use even for washing the hands or face while affected with fever. When in health they however frequently resort to bathing in the streams, especially in the cool of the morning. When exposed to rain, their mode of protection from its evil effects is to strip naked, or as nearly so as decency will admit, in which, however, they are by no means scrupulous. Some have supposed that this practice was for the purpose of protecting their scanty covering and not their bodies, but I was told that they regarded the rain falling directly upon the skin as less prejudicial to health than the effect of a wet garment.

I have generally found that water taken into the stomach in malarial fevers would induce irritability of that organ, and frequently persistent vomiting, and that the tongue would become coated and much dryer than when abstained from; consequently I have usually found it necessary to interdict its use altogether. There is certainly a very intimate relation between moisture and malaria, and the question offers a field for a more thorough inquiry than I am able to give it in the space of these papers.

CURIOUS CASE OF MUSCULAR CONTRACTION OF THE ARM AND FORE-ARM IN CONSEQUENCE OF A BLOW UPON THE ELBOW.

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Miss B——, about 20 years of age, an operative in one of the cotton mills in this city, while engaged about her loom, on the 10th of November last, received a smart blow from the "beam" on the inner side of the elbow, directly over the course of the ulnar nerve. The blow was not sufficiently severe to break the skin or to leave any mark; but on getting the arm out of the machine, the hand was found to be forcibly flexed upon the forearm and abducted to its fullest extent towards the ulna. The fingers were straight but rigid, the forearm immovably fixed at right angles with the arm.

In this condition the patient was brought to my office. With a good deal of force *gradually* applied, the limb could be brought into natural position; but on removal of the force, contraction took place at once. As forcible extension was attended with considerable pain, chloroform was given, and complete relaxation took place as soon as the patient was completely under its influence, but not before. The first effects of chloroform seemed to be rather an increase of the rigidity. As the patient came out from the influence of chloroform, the limb contracted as before. It should be mentioned that there was no *numbness* in any part of the limb.

Judging from these trials that some injury had been done the nerve at the point where the blow had been received, the arm was allowed to remain in its unnatural position, and anodyne fomentations ordered to be kept constantly applied to the elbow.

Nov. 14th.—Four days after the accident. Patient in very much the same condition. The rigidity is more marked in the elbow-joint. Biceps hard and protuberant. With considerable difficulty straightened the arm and hand, and applied a straight splint for the purpose of keeping the limb extended.

15th.—Was called in haste to the patient yesterday, some hours after the application of the splint. Found her in great suffering and alarm, in consequence of her head being forcibly drawn down to the shoulder of the affected side. The muscles of the shoulder, neck and arm were now all in a state of rigid contraction, causing the most painful distortion. Sulphuric ether was at once administered, and relaxation of the muscles took place as before; but as soon as the effect of the ether passed off, the contraction recurred in the arm and hand, though the head and neck remained free.

20th.—Improvement in the arm is very trifling. Friction with liniments, galvanism, &c., have been tried without any marked effect. Have been obliged to give ether several times to relieve the contraction of the muscles of the neck. Each time the head has been drawn down it has been in consequence of accidentally hitting the inside of the elbow.

25th.—The arm is improving, though still useless. For the last week, I have been practising forcible and rapid extension and flexion. While doing this, have noticed that there is as much difficulty in rapidly *bending* the arm as in *straightening* it. Within the past week the patient's head has been drawn down to the shoulder twice, in consequence of having hit the elbow accidentally. Have been obliged to administer ether as before to relieve her.

From the last date to the present time (Jan. 2d) the improvement has been gradual. The patient has now fully recovered the use of her arm, although within two weeks she has been obliged to take ether to relieve the muscular contraction of the neck and arm, brought on by hitting her elbow.

Cases of muscular contraction from blows over the tracks of nerves, as in the case above given, must be extremely rare. Temporary paralysis frequently follows pressure or blows on nerves; but it will be noticed that numbness was never complained of in the case just related.

The sympathetic contraction of the muscles of the neck and shoulder is also a noticeable feature in this case, and is accounted for by the fact of these muscles being supplied with nerves having a common origin with the ulnar.

In *Braithwaite's Retrospect*, No. XXIV., page 164, is an account of a case somewhat like the one now given, though it was much milder in character—lasting but a few hours.