

the outer and posterior side of the right wrist, and necessitated his discontinuing the fight. This wound was sutured; and, at the time, a small swelling was noticed about four inches above the wrist in the line of the radial artery. Next morning the swelling was about the size of a hazel nut; there was distinct fluctuation, but no pulsation, and the forearm was swollen and the skin ecchymosed. On the morning of the 20th the tumour had increased to the size of a small walnut, and the swelling of the forearm was more marked. Fluctuation was visible in the tumour, and could be distinctly felt one and a half to two inches away all round. It being now evident that a rupture of the radial artery had occurred, an incision was made in the line of the artery over the tumour, and after the clots had been turned out and the extravasated blood allowed to escape, the artery was ligatured just above the site of the tumour, traced down for one inch and another ligature applied, and the intervening portion removed; this piece was crushed and had two rents in the coats. The man was discharged to duty on April 30th, 1906.

The points of interest in this case were: (1) that there was no connection whatever between the two injuries; (2) that the wound for which he was admitted was so trivial that admission would not have been necessary had not the other injury to the arm been noticed at the time.

#### A LITTLE-KNOWN TREATMENT FOR SUNSTROKE.

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WHILE stationed in Jhansi, India, in 1903, I saw my first case of sunstroke. Jhansi in 1903 was exceptionally hot, the thermometer registering anything from 105° to 115° F. in the shade.

The cases that were admitted were all of the same type, the patient being brought to hospital in an unconscious state; the breathing was deep and stertorous; the skin dry, hot and burning; pulse rapid, and the body temperature between 107° and 110° F.

The patients were stripped and put on a bed in the shade; one man poured water (as cool as could be obtained) from a height; two other men rubbed the body with pieces of ice, and the back of the neck was blistered. An iced-water enema of about two pints was given; a large clinical thermometer was kept under the armpit, and the iced-water enema repeated every ten minutes till the temperature fell to 102° F.

It is the internal active treatment, *i.e.*, iced-water enema, I particularly wish to bring to notice, as I consider the repeated enemata in each case saved the man's life. In that year, 1903, we had nine cases of sunstroke admitted, and all recovered. We also had six or more cases of men brought into hospital with temperatures between 103° and 105° F., complaining of pains in the head and dizziness, and very drowsy, but not

unconscious, and with all the prodromata of sunstroke; all were treated with the iced-water enematas, and left the hospital the following morning feeling quite fit. I advocate this treatment on common-sense grounds, as, when you are hot and want to cool yourself, you call for an iced drink. The patient brought to hospital is generally unconscious, or nearly so, and the iced enematas are much easier and safer to administer than washing out the stomach with iced water.

I also tried the enemata on a case of sun traumatism. The patient had just arrived in the country and had been on baggage guard at the docks in Bombay; his temperature ran up every few hours between 104° and 106·8° F. This lasted during the daytime for five days. The temperature was taken every two hours, and if found rising above 104° F., an enema was given, with the desired result. The patient eventually left the hospital recovered.

Osler, in his short article on Sunstroke (p. 398, 5th edition), says, after advising "packing the patient in a bath of ice" . . . "Ice water enemata may also be employed." Now, we in India do not get ice issued out to enable us to pack each case in a bath, besides giving ice to other serious cases in hospital; this is another argument in favour of the iced enemata, as it takes very little ice to cool a quart of water.

Manson, in his account of Siriasis, says: "Unless active measures to lower temperature are taken early in the progress of the case, and unless the measures are vigorously carried out, in the great majority of instances death will occur within a few hours, or even minutes, of the onset of insensibility." He does not mention enemata at all, but advocates Chandler's external treatment. This treatment in India could not be carried out in the majority of stations, as the ice has to come from a distance, and the scale allowed out here is very small.

I should also very much like to know whether this treatment is successful in cases of hyperpyrexia, of rheumatic and scarlet fevers, hysteria and tetanus, &c., and hope that officers who try this active internal treatment will announce successful cases.

The statistics for sunstroke from 1900 to 1903, show a very high percentage of deaths:—

	Remaining from previous year	Admitted into Hospital	Died in Hospital	Died out of Hospital
1900	2	174	40	12
1901	1	157	37	9
1902	1	171	46	8
1903	0	307	54	15

If this internal active treatment were known to officers newly arriving in this country, the case mortality would show a marked decrease.

I do not claim this as my original treatment, as it was shown to me by Captain W. A. Heppolette, Indian Subordinate Medical Department.