

Therapeutics.

COLD WATER IN FEVER.

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It is not long since every fever patient was carefully guarded from pure air and fresh water. Thick blankets and hot beverages seemed indispensable. Several medical men observed that this treatment did more harm than good; but James Currie was the first to have any success in fighting against these prejudices.

Old and deeply-rooted errors do not fall at one blow, especially when they derive support from the extravagances of the opposition. So at least it was with us. Priessnitz, and the fanatic hydrotherapeutists who followed him, barred the way for a long time to the rational use of cool water; and it is only about fifteen years ago that we recurred to the healthy principles of Currie.

The matter itself is very simple. If a patient at 40° C. (104 F.) is placed in a bath at a lower temperature, he must quickly part with heat. In fever the natural regulation of heat which keeps our body at an almost equal temperature is insufficient. The cool bath makes up for this. If we measure the temperature after the bath, we shall find it lower than before. The blood that surrounds the cells of our nerve centres is less hot. The patient therefore feels stronger and quieter.

Cold baths (15–20° C.=60–68 F.) have the clearest effect. Extensive experience has taught that their action is most positive when they are short and often repeated. Very weak patients must begin with 35° (97 F.) and then the warmth must be lowered to 20° (68 F.), by carefully and gradually adding cold water. In the meantime the body should be gently rubbed.

Cold sheets (*Kalte Einwicklungen*) are less efficacious and cold affusions (*Uebergiessungen*) have less effect; this latter considered merely from the antipyretic point of view.

Only a high degree of weakness of the heart, loss of blood, or perforation of the bowels, are contra-indications against the use of cold baths. Menstruation is not one when the fever

is at a dangerous height, and pregnancy never. Every age and every constitution permits the withdrawal of fever heat, only it must be observed that the loss of heat is in inverse proportion to the weight of the body. For babies we need therefore seldom go under 30° C. (86° F.) to have a full effect; the temperature of the water must be lowest for strong adults.

External application of cold proves, like, all other febrifuges, to be most efficacious when the temperature has a tendency to sink spontaneously. That is from seven in the evening till morning, and again in the day from eleven till two o'clock.

The after-effect is of great importance. Under some circumstances it lasts several hours, that is, the lower temperature continues even when the patient has been removed from the water. The reason is probably as follows:—

In fever the vessels of the skin are generally much contracted. The cool water acts as a strong stimulant on them, and causes a somewhat stronger contraction to take place, but this is only of short duration. Relaxation for a longer term is the necessary consequence. The hitherto bloodless and dry skin becomes filled and moist, and thus the irradiation of warmth goes on. It is easy to convince oneself of this state of the skin after the bath. The cooler the bath and the longer it lasts, the more evident and the more lasting will be its result.—*Practitioner.*

FOETAL CONDITION OF THE LUNG IN A CHILD THAT HAD CRIED.—Dr. Erman, of Hamburg, relates the case of a woman who was delivered of three seven-and-a-half months' children, two coming into the world living, and the third being dead-born. Both these children cried loudly while being washed, their cries being heard in another room, some distance off. They both died half an hour after they were born. At the autopsy it was found that the whole of the lung of the one child sank in water, even when cut into small pieces; and the lung of the other did the same, except as regards a very small portion of the edge of one of the lungs. The lungs in both were undistended, dense, and of a bluish colour.—*Virchow's Archiv.*, B. 66, Heft 3.