cally possible that there may be cases in which the strength of the uterus is sufficient to keep the hemorrhage within bounds for a length of time sufficient to allow a dilatation of the os to occur, or, at least, softening of the cervix by the natural forces. Upon the other hand, no obstetrician of experience will doubt the statement that a dilatation of the rigid cervix may well occupy sufficient time to allow the hemorrhage to become fatal if it should start up during the operation, an accident which the history of these cases shows to be not unusual.

The treatment which I should propose for myself in future cases of this desperate nature is as follows: If the hemorrhage is from the start so profuse as to occasion great distention of the uterus and an early and alarming collapse of the patient, a large majority of the women will be lost under any method of treatment; but I still believe that a prompt delivery then offers the only chance that there is for the life of the mother.

[The question of the possibility of saving such cases by the prompt performance of Porro's operation has been suggested, but the time does not seem to me ripe for more than the merest mention of this question.]

If the onset of the hemorrhage is gradual, if the initial collapse is not extremely alarming, and the progress of the hemorrhage seems to have become arrested before any extreme distention of the uterus occurs, I shall determine my choice of treatment by the condition of the cervix. If this is so rigid as to offer a prospect of extreme difficulty in its dilatation, I shall confine myself, as in this last case, to efforts at promoting the action of the natural forces by moderate dilatation of the os with the fingers, stimulation, and other measures intended to sustain the strength of the patient. But I wish to be understood that if this method of treatment is adopted, a physician competent for prompt delivery must be continuously by the bedside of the patient and ready to interfere.

If, in this latter class of cases (with limited hemorrhage and moderate collapse), the conditions are such as to warrant the belief that immediate dilatation and version will be reasonably easy, I believe that will offer the best chance of saving the patient. The life of the mother is always so seriously endangered, and the fetus has in the past so rarely been saved, that the existence of the latter should ordinarily be left out of consideration in determining the plan of treatment which should be adopted.

SPONGE BATHS AND FULL BATHS IN TYPHOID.

BY RICHARD C. CABOT, M.D.

DURING the summer of 1893, both sponge baths and full baths were used for typhoid cases in the service of Dr. E. G. Cutler at the Massachusetts General Hospital. With his kind permission, I report results observed in 1,000 baths given while I was interne there.

Out of this number only 200 were full baths, as it was only at certain times of the day that two ward-tenders could be had to lift the patient in and out of the bath. To children light enough to be moved by one attendant, only full baths were given.

The body of the tub used was of rubber cloth, hanging from a frame of oak which was supported on four legs with castors and rolled to the patient's bedside.

It was filled and emptied in the ward by means of a rubber tube connected with a sink outside. All baths, whether by sponging or in the tub, were given once in four hours in case the temperature was at or over 102.5° F.

Tub baths were all at 65° F., and lasted twenty minutes, vigorous skin friction being given throughout.

Sponge baths were given according to a schedule, starting with 65° F., for a fever of 102.5° and using water five degrees colder, for each one-half degree of fever above 102.5°. For a temperature of 103°, the bath was at 60°; for 104°, 50°; for 105°, 40°; above that, ice-water.

Sponge baths lasted half an hour, the patients lying on a rubber sheet, and the water squeezed and rubbed upon them with a large sponge.

Half an hour after each bath the temperature was recorded again.

Eight hundred sponge baths gave an average drop in the temperature half an hour after, of *two-fifths* of a degree, Fahrenheit.

Two hundred tub baths gave an average drop in temperature of *two and two-fifths* degrees, Fahrenheit.

After a tub bath the temperature often fell to normal or even subnormal. The largest single drop was from 105.5° to 96.5°. This was in a child of six. No untoward results followed in this case nor in any other.

The number of baths needed under the tub-bath system was much less than under sponging, for after a full bath it often took eight hours, and sometimes twelve, for the temperature to get up to 102.5° again.

Sponge baths brought the temperature to normal only three times in 800 baths given. Not infrequently the temperature would be from one-fourth to two degrees higher after a sponge bath than before, and in a few cases this happened after tub baths.

After the first almost all patients liked the sponge bathing, but not one liked the tub at any time.

Shivering, cyanosis and feeble pulse were the rule after a tub bath, and lasted generally about twenty minutes. One patient always shivered so as to shake his bed for nearly an hour after his bath. He made a good recovery.

These symptoms were very slight after sponge baths.

After all baths patients were wrapped in blankets, and sometimes half an ounce of whiskey was given. I was generally present to watch each patient during his first tub bath, not after that, unless for some special reason. Hemorrhage or perforation were the only counter-indications for a bath.

Ward-tenders lifted the female patients to and from the tub wrapped in a sheet. The baths were given by the nurses.

The course of cases treated by tub baths did not materially differ from that of those sponged, so far as observed. For relief of delirium, insomnia, stupor, twitching and other nervous symptoms the sponge baths seemed to answer as well as the tub baths, and were unquestionably less fatiguing to the patient.

The number of cases is too small to draw any conclusions as to the effect on the mortality. The above facts are reported simply to show the great superiority of the tub bath in reducing temperature (supposing that to be desirable), and the absence (so far as observed) of any difference in the effect of the two methods of bathing on symptoms referable to the nervous system.