At this time or soon after we have a bloody discharge from the uterus.

Tubal or extra-uterine pregnancy might be mistaken for appendicitis or an ordinary uterine abortion and salpingitis, but from careful history and study of the case the correct diagnosis can be made. Treatment, I might say, is surgical, but there is much can be done while waiting for the surgeon to arrive.

If rupture has taken place into the abdominal cavity, there will be profuse hemorrhage and we have but little time to wait. Therefore, put the patient in bed flat on back, arms and legs bandaged to shoulders and hips, ice packs over the abdomen, saline transfusion under breast (fountain syringe will do if we have nothing better), attached to aspirating needle. Also have foot of bed raised and saline by rectum and morphine to keep patient quiet. Adrenaline 20 to 30 M. to pint of saline is useful.

Rupture in other parts are treated the same way, but less heroically.

I will not go into the surgical technique, but to say we should operate in all cases as soon as possible, as we never know when hemorrhage is going to take place even if it has seemingly been stopped.

The three cases which I have seen, two of which were my own, were operated on by myself, one being about six weeks duration and the other about four and one-half months, both patients recovering.

The third I saw while an interne at the Memphis City Hospital, to which I had the opportunity of being the assistant, occurred at full term. The operation being done during shock, the patient died in a short while.

In conclusion, I wish to insist upon a careful diagnosis of each case of suspected tubal pregnancy as early as possible, thereby giving the patient a much better chance of her life.

Tennessee Trust Building.

THE BEST METHODS FOR THE CONTROL OF FEVER. RECOMMENDATION OF RECTAL IRRIGATION.

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Methods for the control of fever have interested the profession from the beginning of medical history, and there is no doubt but that some of the methods that have been used have done more harm than the fever itself would have done. Little thought was given to the question of cause, but the fever itself was considered as something to be combated and conquered by almost any means that would produce a lowering of body temperature.

Because of this erroneous view of the subject, methods of the greatest value fell into disrepute in some quarters and many have been led to ignore measures which, when properly applied, give most excellent results.

Frequently, in consultation, when I have

recommended some hydiatic procedure to the attending physician, I have been met with some such expression as, "But, Doctor, do these baths do any real good; doesn't the temperature go just as high after the bath as before?" True it is that the temperature frequently returns, sooner or later, to the same point that it was before the bath, and it is this observation that has caused those who consider the permanent lowering of temperature the essential element in the control of a fever case, to look with disfavor upon hydrotherapy.

Abnormal rise of body temperature is usually an expression of toxemia, and it is the toxins and not the fever itself that does the harm. We look upon prolonged fever as being very harmful to the nervous system, but is it

not the prolonged poisoning of the nerves by the toxins that cause the fever that really does the harm? The high temperature is simply an expression of the degree of toxemia.

If this is true, there are just two right ways of reducing fever—by getting rid of the source of toxin production and by increasing the elimination of toxins already produced.

From our knowledge of the physiological action of the coal tar products, do they in any way meet either of these conditions? Will aconite or veratrum kill germs or increase the elimination of their toxins?

The source of intoxication is most often found in the intestinal tract, and it is easily proven clinically that bacterial action in the intestines can frequently be largely controlled by thorough cleansing of the whole tract, proper feeding and intestinal antiseptics. While bacterial action may be limited by these methods, it can seldom be entirely done away with.

In increasing the elimination of toxins an agent should be employed that will in no wise be depressing to the vital powers. We have in the cold bath, when properly employed, a procedure that not only does not depress, but is stimulating to the vital centers, and by this stimulation causes an increased output of toxins.

It is this power of increasing toxin elimination to which the cold bath in fever owes its chief value, and the extent of its efficiency depends entirely upon the method of employing the bath. Not that it makes any special difference as to whether a tub bath, sponge bath or some other form is employed, but as to whether the particular form employed is so given as to produce proper reaction, for *reaction is essential*.

If the cold tub bath, commonly called the Brand bath, after Ernest Brand, of Stettin, who first proved its efficiency in the treatment of fevers among the soldiers of the German army, is employed, it is *absolutely essential* that vigorous yet superficial friction be maintained by two or more attendants the whole time the patient is in the bath. It is true that

after any given bath the temperature may return to its former level or even temporarily a little above, yet if the baths be continued regularly you will note that this rebounding tendency grows less and less, and finally when the elimination of toxins becomes greater than their manufacture, the temperature will not return to its former height.

There are a few conditions in which reaction is not desired, then the cold full bath without friction or some other measure that does not favor reaction would be indicated.

Measures like the cold towel rub, cold sponge bath, hot evaporating sponge bath, etc., are more generally useful to the physician in general practice than the Brand bath. It is a mistake, however, to think that the technique of these procedures is unimportant, for upon proper technique will depend your results.

During a recent lecture before senior medical students upon *laryngitis*, I made the statement that the heating compress is a very efficient remedy, and proceeded to describe the technique of the measure, cautioning particularly that the woolen covering should completely cover and overlap the edges of the moist gauze for half an inch. The next day one of the students asked to be excused from recitation, stating that he had tried my compress treatment with the result that he could not speak above a whisper. I asked him to tell me just how he had applied the compress, and was not surprised to find that he had been very careful to have half an inch of the wet gauze project from either edge of the woolen covering.

We as physicians should always bear in mind the fact that any agent that is powerful for good when properly used may be just as powerful for harm when improperly used.

Proper technique in hydrotherapy is very important, and we should not condemn a procedure until we are sure that it has been properly applied.

Practically all of the leaders in our profession are now using hydrotherapy in the place of drug antipyretics. A short time ago Dr.

J. V. Shoemaker, Professor of Therapeutics in the Medico-Chirurgical College of Philadelphia, author of one of our leading text-books on *Materia Medica* and Therapeutics, made the following statement before a body of medical men:

"In olden times the physicians were limited to a smaller number of drugs, and, speaking for myself, the older I become the fewer medicinal substances I employ, although I am a teacher of *materia medica*. The more closely we approach Nature's method in the management of diseases the better for ourselves and our patients. Most of the substances enumerated in our *materia medica* are not actually used. Excessive drugs weaken the vital powers. I wish to point out in this talk that we are called upon to treat fever in the simplest and safest possible way.

"The medical profession has, of late years, like the pendulum of a clock, swung to an extreme in giving powerful antipyretics. We have fallen too much into the habit of using compounds, of which we have little real information.

"The value of water in the treatment of many forms of disease can no longer be overlooked. Its effects are chiefly due to its temperature, although the physical contact of the liquid must have an influence upon all the organs and tissues. These qualities and powers are what we need in the combat against fever. There is no other agent which possesses such a variety of serviceable attributes."

It is not the purpose of this paper to discuss the ordinary hydropathic procedures for the control of fever, but rather to call especial attention to a method not commonly employed and yet of the greatest efficiency.

Sometime ago in a case of typhoid fever with a temperature of 105 degrees, upon which the Brand bath or cold towel rub had little or no apparent effect, I was led, through the writings of Kellogg, to try continuous rectal irrigation with cold water. It worked like a charm and the results impressed me so greatly

that I have used it since that time whenever occasion offered.

From my observations I am led to believe that the same good effects that are obtained from the use of the Brand bath can be secured by the proper use of rectal irrigation. There is a very marked lowering of temperature and an increased output of toxins as shown by the toxicity of the urine and feces.

I usually employ the cold towel rub in connection with rectal irrigation, but upon several occasions, where there was a persistent high temperature, I controlled it nicely by the irrigation alone. I believe it is the most powerful method that we have for the control of hyperpyrexia.

The technique is simple; either a glass or metal two-way irrigator point should be used. The ordinary rubber douch apparatus found in nearly every home is all right for the water supply and a piece of rubber tubing about three feet long is needed for the waste.

Hang the bag of the fountain syringe about a foot above the level of the patient's body; if it is too high the pressure stimulates peristalsis, and makes the procedure unpleasant. Fill it with water at the desired temperature, let the stream flow a second to free the tube from air, then insert the point carefully and turn on the water. A slight unpleasantness or fullness is felt by some until the flow of the waste is thoroughly established, when it passes and a sense of comfort usually sets in. After one or two irrigations the patients enjoy the procedure.

The length of the treatment will depend upon several factors—the effect produced on the patient's temperature and the temperature of the water employed being the principal ones. The irrigation should be started with water at about 70 degrees F., and if this does not produce the desired result a lower temperature should be employed. I have on one or two occasions of hyperpyrexia in robust subjects used ice water with apparently very good results.

The temperature per mouth should be taken

several times during the irrigation, which I usually continue from twenty minutes to half an hour, and the fact should be kept in mind that we are dealing with a powerful agent and proper precaution should be taken against chilling or collapse. A hot water bag at the patient's feet is usually gratifying.

It is not wise to lower the temperature below 100 or 101 degrees by this means, as there is a tendency for it to still fall somewhat after the irrigation is discontinued, and when the temperature is lowered below 101 degrees there is danger of chilling.

It may be best or even necessary to give a cleansing enema in some cases before the irrigation is begun.

The results obtained from this procedure

are only in small part due to simple refrigeration, the nerve endings of the rectum and sigmoid are richly supplied with sympathetic connections and it is the stimulation of these nerve endings to which our results are most largely due.

The advantage of this form of procedure over the Brand bath is obvious; the patient lies quietly in bed, often falling asleep during the progress of the treatment, and it may be employed where there are no facilities for using the Brand bath.

Its advantage over the cold towel rub and other measures of that type lies chiefly in that it is more powerful. I believe that it is the most powerful of our hydratic antipyretics.

THE TREATMENT OF SYPHILIS WITH ERLICH'S DIAMIDOARSENOBENZOL (Preparation 606).

By DR. W. WECHSELMANN,
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(Translated by Dr. William Litterer, of Nashville, for the Southern Medical Journal from the Dermat. Ztscher., Berlin, 1910. XVII.)

Remedial agents recently introduced for the treatment of syphilis have not been accorded full recognition. This may be due partly to the unpleasant results they have caused so that there exists a temporary mistrust against the use of newer remedies in the therapy of syphilis.

As a matter of fact, the question really is whether such attempts are justified in antagonizing the "traditional" mercury (iodid) treatment in vogue for centuries. In this respect much certainly remains unsatisfactory. It is well assumed that a great, nay, even the greatest, portion of those infected by syphilis are cured by thorough specific treatment, but this is not positively proved, since recurrences have been recorded in chronic cases after the lapse of decades, thereby a criterion is surely furnished that a safe cure has not been established; even Wassermann's reaction is not to be looked upon as absolutely reliable until after tens of years, although it has solved the main

problems of syphilodology. At any rate it is a fact that even with the best specific therapy many cases—more than usually supposed—compare Fournier's work on "Late Secondary Syphilis"—develop secondary and tertiary symptoms of infection, aside from the so-called para-syphilitic diseases, and that no one who has a case of primary syphilis to treat can predict a sure result as to the course of the disease. Hence the endeavor for a better therapy is fully justified. The requisites then which such a remedy must possess are: (1) it should not be more injurious in its effects than mercury, and (2) that it should act more powerfully than the latter upon the symptoms of the disease. Through the systematic examination of many hundreds of such combinations by Ehrlich and his coworkers, we are indebted for the discovery of such a remedial agent. Ehrlich's dichlorhydrate of diamidoarsenobenzol No. 606 meets both requirements positively, as shown by the excellent experi-