uteri as may be free from adhesions. Schücking, stating that the ordinary method of stitching the uterus to the abdominal wall does not produce firm enough adhesions to secure it permanently, proposes to accomplish the result by stitching the fundus directly to that portion of the peritoneum which is reflected backward from the pubic arch forming the anterior pelvic floor; that is, the anterior peritoneal roof of the vagina. A special needle is employed, by which the stitch is carried up through the cervical and uterine canal, passing through the fundus and then forward and downward until it emerges into the vagina, where it is tied and remains until there is a decided adhesive peritonitis set up. The bladder is to be pushed one side by a sound manipulated by an assistant. Schücking states that in twelve cases the stitch passed through the bladder instead of beside it three times, without leaving any bad results.

I have purposely alluded in the briefest way to separating the adhesions of backward displacements when laparotomies are performed for the removal of diseased tubes and ovaries, because it would carry this discussion outside the strict limits of my subject. My own view upon the question is, that unless there are such decided symptoms of trouble from the displacement as leave no room for doubt, it is better to let the uterus alone. If it is decided to attempt its replacement, secure it forward by one of the methods of shortening the round ligaments rather than by ventral fixation.

SUMMARY.

From the results of my own operating I have drawn for my guidance the following rules:—

Be sure that the displacement is the cause of the symptoms. Never resort to operative measures without first exhausting all forms of non-surgical treatment in so far as they may be applicable to the case under consideration. An adhesive backward displacement of the uterus demands for its cure, first, separation of its adhesions; second, anterior fixation. Separation may be accomplished, first, by forcible division without opening the abdomen; second, by laparotomy and subsequent division or cutting. The advantages of the first method are that in suitable cases the patient is exposed to few dangers beyond a simple traumatic peritoneal inflammation. The advantages of the second are that it supplements the first; assuming greater risks it strives for greater successes; the adhesions being dealt with more openly, any accident that may arise is more easily remedied; it can be employed in cases to which the first is inapplicable. It superadds, however, the dangers of a laparotomy.

A backward displacement which is free originally or which has been freed from its adhesions may be secured forward. First, by shortening of the round ligaments, either by the Alexander-Adams or Wiley method; Second, by fixation of the uterus to the peritoneum of the anterior abdominal wall, or to that of the anterior pelvic floor (Schücking's method).

Of the four operations, the only one not involving interference with the peritoneum is the Alexander-Adams. I believe that it should be selected, from my own experience of its successful results. I make an exception, that if for any other reason the abdomen has been opened, Wiley's operation may perhaps prove its equal.

These round ligament operations leave the uterus in practically a normal position, without undue tension on

tubes, intestines, or blood-vessels. There is no danger of fecal fistulae or incarceration of the intestines; no interference with subsequent pregnancies. Permanent successful results do not depend upon adhesions or suspensory stitches, and the uterus is left movable, not fixed.

PREGNANCY AND OPERATIVE SURGERY: THEIR MUTUAL RELATIONS.¹

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An impression exists generally among the laity, doubtless derived originally from the profession, that all operative surgery upon the pregnant woman should be avoided. This extends even to the extraction of teeth, however much the patient may suffer from them.

Undoubtedly, this caution on the part of the profession, arose previous to the days of anaesthetics, from a fear that the shock to the nerve centres would induce abortion. That some foundation for this may have existed in those days is probably true. Even as late as the time of Velpeau we find him saying that "all operations upon the pregnant woman should, if possible, be postponed."

That no such cause for fear should now exist is apparent from the many operations that are being reported in the current medical literature; and yet, while there is much less to fear from the minor operations than before the days of anaesthetics, there always remains the danger from septicæmia, which becomes a powerful cause of abortion or premature labor. I should hesitate much more on this account than any other when called upon to decide in a given case of pregnancy, requiring operative measures. It is more especially with reference to operations upon the pregnant uterus and its appendages that this paper is written.

That ovariectomy has been made with impunity upon the pregnant woman has been demonstrated many times. Removal of the ovaries and tubes, both by accident and design, has shown that operations involving parts very near the uterus, while in the pregnant condition, do not endanger fetal life. Trachelorrhaphy, even, has been made upon the pregnant uterus, and the patient has still gone on to the completion of her term of gestation. Of course many of these operations have been done without the fact of pregnancy being known at the time, but like many other valuable truths in medicine, they have been good object-lessons to the practitioner and the profession.

The following case may serve to guide some future worker in the path of safety for his patient:—

Mrs. —, aged thirty-five, always regular, missed her periods in October and November last, and manifested some other signs of pregnancy. The pelvic pain, particularly in the right side, became frequent and severe, so that her physician, Dr. J. F. Thompson, brought her to me for consultation.

Examination disclosed a small tumor in the right side of the pelvis, somewhat elastic to the touch, while the cervix and os had all the appearance and feel of a pregnant uterus. Directly in the middle line, rising a little above the pubes, was a growth very much resembling in shape and size the fundus uteri at the end

¹ Read before the Maine Medical Association, June 11, 1889.

of the second month of gestation. The peculiarity of it, however, was that it was much harder than one would expect from a state of pregnancy.

From a bimanual examination it was extremely difficult to determine that it was not a part of and continuous with the soft, enlarged cervix. Assuming it to be the fundus, the only theory probable was that the tumor in the right side must be an extra-uterine pregnancy; and the deep-seated pains, coming in spasms, seemed to justify that theory. The one important element lacking, was the absence of any bloody discharge, or shreds of membrane usually found in ectopic gestation.

I advised waiting for two weeks, during which time the suffering increased, and the patient desired something done to relieve her. The more I examined the stronger was my belief that the central growth was a subperitoneal fibroid growing from the anterior wall of the uterus, the fundus of which was flexed to the right, and held down by the pressure of the tumor between it and the pubes.

Laparotomy was advised and consented to, with a view to remove the tumor, if such it proved to be, and was practicable, or in the event of there being tubal pregnancy, to remove it. Section showed a fibroid, ovoid in character, with sessile attachment to the middle of the front of the uterus. Dividing the peritoneum high up around the tumor, I enucleated the mass, leaving the uterine wall very thin from absorption of its muscular coat. It was also very vascular, but stitching the peritoneum and the base of the wound freely with fine catgut, the hemorrhage was entirely under control. As soon as the pressure from the tumor was removed, the fundus uteri came into place, and assumed its normal position in the pelvis.

Recovery was rapid and without complications, and the pregnancy continued free from further pain or discomfort. At full term, after a long and rather tedious labor, she was delivered yesterday (September 10th) of a healthy male child. The uterine contractions were very severe and frequent during the last hour or two. Near the close she had two or three convulsions. I had more or less fears for the integrity of the uterine wall, but the result shows that the cicatrix was firm.

My experience in this case would lead me to operate in all such cases, where the element of suffering was as prominent, which, if not relieved, may have resulted fatally or in abortion.

RECENT PROGRESS IN THE PATHOLOGY OF THE NERVOUS SYSTEM.¹

BY PHILIP COOMBS KNAPP, A.M., M.D.

TRAUMATIC NEUROSES.

SERLING and Kronthal²³ report a case of the so-called traumatic neurosis with an autopsy. The patient, a brakeman, forty-two, with no special heredity, was thrown from his seat by a collision, striking his chest and abdomen against the brake-wheel, fainting in consequence. A few hours after the accident a slight abrasion was noted on the forehead. The collision was probably a slight one. After the accident the patient manifested psychical depression and melancholia. He

was incapacitated from labor, apathetic toward what formerly interested him, and easily irritated when matters went wrong at home. When he went near a train he turned pale, seemed terrified, grew confused and complained of precordial distress. The remembrance of the accident also haunted his dreams. He had frontal headache, numbness and tingling in the hands and feet, tinnitus, earache, and spots before the eyes. There was much physical weakness. The intelligence was diminished, the face expressionless; the muscular power in the arms was diminished, the gait broad and unsteady, being worse when the eyes were shut. There was no muscular rigidity or sensory disturbance. The knee-jerk was obtained only on re-enforcement. Micturition was difficult and he was almost impotent. The digestion was poor, (he had previously been constipated) and he had much palpitation. After the accident the arteries gradually became rigid. The heart was enlarged and both lungs were emphysematous. Three years after the accident, in September, 1887, the question of damages was settled. For three months after that there was no improvement. At that time hypnotism was tried with remarkable success. Most of the symptoms were relieved, he had fifteen hypnotizations, and extolled the treatment most highly. Massage relieved his constipation, and for some time he was almost well. Later on, however, the respiratory symptoms recurred, he had cardiac asthma, swelling of the hands and feet, and died in January, 1889, of cardiac failure. The autopsy showed œdema and opacity of the pia, arterial sclerosis, dilatation and fatty degeneration of the heart with thickening of the valves, slight pulmonary œdema, slight interstitial nephritis, fatty infiltration of the liver, and atheroma of the aorta. A careful microscopic examination showed marked sclerosis with foci of hyaline and fatty degeneration of the whole arterial system, the cerebral and spinal vessels being especially involved; a peculiar degeneration of the stem of the sympathetic; spots of a mild degree of degeneration in the spinal cord in all portions of the white matter, degeneration of the ganglion cells in a short abnormally formed part of the lower dorsal cord, and hemorrhage into the middle dorsal cord. This degeneration in the cord is regarded as a result of the vascular disease, which, in the absence of any syphilitic or alcoholic history, is unusual at so early an age. The whole trouble had evidently an organic basis — the disease of the vascular system. The question of importance is whether a sudden change in the circulation, caused by the accident, can give rise to permanent changes in the blood-vessels.

[In a recent editorial upon this subject,²⁴ the latest work of Oppenheim and Strümpell upon this subject was reviewed. A number of Oppenheim's patients exhibited signs of circulatory disturbance, rapid pulse, palpitation, and symptoms of cardiac failure. In a personal communication upon this subject,²⁵ the reporter called attention to the experiments of Mendel and Fürstner on dogs, where rapid revolutions on a circular table gave rise to hemorrhages and vascular dilatation. The present case is of the utmost importance as affording further proof in favor of the theory that a trauma may give rise primarily to vascular disturbances, and secondarily to structural changes dependent upon them, and as showing that a symptom-complex appar-

¹ Concluded from page 362 of the Journal.

²³ *Neurologisches Centralblatt*, June, 1889. Nos. 11, 12.

²⁴ See this Journal, May 30, 1889.

²⁵ See this Journal, November 1, 8, 1889.