

sible to obtain an outline of the living fœtus in the body of the mother. The difficulties to be surmounted are the thickness of the tissues and the distance at which the Crookes's tube is necessarily placed from the fœtus itself. Anatomical specimens of nteri and their contents, removed from the body, should occasion no difficulty whatever. By varying the electric force employed and the time of exposure it is undoubtedly possible to obtain a useful picture of the contents of the living womb.

GYNECOLOGY.

UNDER THE CHARGE OF

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THE INFLUENCE OF CASTRATION ON STRUCTURAL CHANGES OF THE UTERUS.

SOKOLOFF (*Archiv für Gynäkologie*, Band li., Heft 2) presents the results of a series of interesting experiments upon bitches and rabbits, undertaken with the view of determining the anatomical changes which take place in the uterus after the removal of one and of both ovaries. After the former operation the beat returned as before, but in no instance after the removal of both ovaries. The animals were killed at different periods after the operation, varying from twenty days to fourteen months, their nteri were removed, hardened, and sections were made. No variations from the normal were noted in cases in which a single ovary had been removed, but after complete castration a well-marked atrophy of the circular muscular layer was observed, which reached its height four months after operation, as well as a disappearance of numerous muscular fibres in the longitudinal layer. The caliber of the vessels was diminished and their walls were thickened, especially in nteri removed several months after castration. The endometrium remained unchanged even a year or more after the operation.

The writer denies that the atrophy of the nterus following castration is due to ligation of the spermatic arteries, since the collateral circulation is speedily restored. It must, then, be attributed to a disturbance of nutrition in the uterine tissue secondary to extirpation of the ovaries, of nervous origin, either central or dependent upon the removal of vasomotor or trophic centres in the ovaries themselves. The writer favors the latter theory. Every tissue must, in order to retain its normal structure, perform its normal functions, as well as receive a proper amount of nourishment. When the normal physiological stimulus of this tissue is absent and its function is accordingly suspended, it undergoes atrophy, even though its nutrition is not disturbed. The regular rhythmical contractions of the uterus cease after extirpation of the ovaries which are the seat of the exciting impulses; its normal functions, menstruation and pregnancy, are eliminated, and muscular atrophy results. The endometrium, not being influenced by

these contractions, remains unchanged. The latter phenomenon may be explained on the theory that the mucosa and utricular glands are presided over by a special nerve-centre independent of the atrophic centre regulating the muscular tissue.

SYMPATHETIC GANGLION IN THE OVARY.

HERFF (*Ibid.*) examines the evidence presented by several observers, notably by Elizabeth Winterhalter, in favor of the theory that the human ovary possesses an independent ganglionic system presided over by a central ganglion, and arrives at the conclusion that the presence of ganglion-cells has not yet been demonstrated in a satisfactory manner, though their existence, at least in the hilum, seems highly probable. However, he denies positively that a true ganglion exists in the ovary.

GENITAL TUBERCULOSIS IN CHILDREN.

MAAS (*Ibid.*) calls attention to the rare occurrence of genital tuberculosis in children in comparison with its frequent appearance in other regions. In a careful search through the literature he was able to find only seven cases, to which he adds an eighth. In the autopsy upon a girl five years old, who died of general tuberculosis, he found tubercular ulceration of the mucosa of the uterus and tubes. The muscular wall of the latter was filled with tubercular nodules, but that of the uterus was not affected. The ovaries were normal. There seemed to be no doubt that the internal genitals were the original seat of the trouble. The cause of the infection was most obscure. It seemed improbable that bacilli could enter the vagina, as the hymen was intact and the ordinary causes (coitus, unclean instruments, etc.) could be positively excluded. Moreover, the vagina was healthy. The presence of a line of old fibrous tubercles along adhesions extending inward from the umbilicus to the parietal peritoneum led the writer to infer that the infection entered through the navel, a fact of considerable interest to the obstetrician.

CRITICISM OF VAGINO-FIXATION.

LEOPOLD (*Centralblatt für Gynäkologie*, 1896, No. 6) states that he has always been opposed to the operation, since it substitutes for the retroflexion a position of the uterus which is no better than the former. The relations of the uterus to the bladder are entirely abnormal, the portio is fixed in an unnatural position, and unless Douglas's pouch is first opened and adhesions are thoroughly separated, it is useless. Moreover, recent reports concerning the serious complications arising in cases of pregnancy in vagino-fixed uteri furnish a powerful argument against the operation.

The writer has been perfectly satisfied with the ultimate results of ventro-fixation, especially during pregnancy and labor. Most of the bad results reported have been due to the fact that either the uterus was fixed in an improper position (especially too high up), or that non-absorbable sutures were used. He employs a single suture on each side, introduced inside of the insertion of the tube, and fixes the uterus not more than half an inch above

the upper border of the symphysis. Although not always successful in his hands, he thinks well of Alexander's operation. He adds the caution that greater care should be exercised in deciding whether operative treatment is indicated in an individual case of retroflexion, since the association of various local and general symptoms with retrodisplacement is by no means a proof that the former are directly due to the latter.

CONSERVATIVE SURGERY OF THE TUBE.

GERBUNG (*Centralblatt für Gynäkologie*, 1896, No. 2) describes a conservative operation for hydrosalpinx after extirpation of the opposite tube and ovary, the corresponding ovary being normal. The sac was incised, its contents evacuated, and the ovary sutured in the opening with fine silk, so that only a portion of its upper surface remained visible. It seemed to be fairly certain that during ovulation the ova would escape into the tube, but, not having a probe, the operator was unable to satisfy himself that the proximal end of the tube was patent, so that coarception might occur.

The patient was discharged at the end of three weeks; she menstruated a month later, and became pregnant after the second period. When examined pregnancy had advanced to four months, and she was in excellent health.

The operation proved conclusively that a hydrosalpinx can, by conservative treatment, be transformed into a tube capable of performing its normal functions, and that the usefulness of a healthy ovary is not impaired by transplanting it into the wall of the sac.

FERRIPYRIN AS A HÆMOSTATIC IN GYNECOLOGY.

In a supplementary report on this drug SCHAEFFER (*Ibid.*) calls attention to its superiority to the chloride of iron in the following conditions: 1. As a simple hæmostatic in all cases of hemorrhage from the genital tract in which a caustic action is not sought for; i.e., in menorrhagia and metrorrhagia of whatsoever origin, as well as in parenchymatous hemorrhage during operations in which it is impossible to suture the bleeding surfaces. 2. As a styptic application after curettage, in a watery solution of 16 to 18 per cent. 3. In a 1 or 2 per cent. solution for irrigation of the uterus and vagina in cases of endometritis, erosion of the cervix, and colpitis, especially gonorrhœal. 4. Applied in the form of powder in inoperable carcinoma of the cervix it not only checks the hemorrhage and foul discharge, but has a distinct analgesic effect. 5. In hæmaturia it may be injected directly into the bladder in a strength of from 1 to 16 per cent., with great relief to the tenesmus.

PSEUDO-MYXOMA OF THE PERITONEUM.

RUEDER (*Ibid.*) reports three cases of this affection, the symptoms being dull, aching pain in the abdomen, which gradually became enlarged; loss of appetite, gastric disturbance, and later dyspnea. There were no symptoms of rupture, so that it is probable that the gelatinous material escapes gradually from the multilocular cysts, or rather grows through their walls.

Although operative interference is indicated, no instances of cure in advanced cases have been reported. It seems as if the absorptive power of the peritoneum had been too seriously impaired.

PÆDIATRICS.

UNDER THE CHARGE OF

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THE TREATMENT OF BRONCHO-PNEUMONIA.

IN a valuable clinical lecture upon the prognosis and treatment of acute broncho-pneumonia in children LE GENDRE (*Le Semaine Médicale*, March 4, 1896, p. 89) describes at length the various means by which hydrotherapeutic treatment may be applied in this disease. The cold chest-pack should be applied every quarter of an hour at first, and then at longer intervals as satisfactory effects are obtained. If these fail after a few applications, the wet pack is to be tried; and in event of its failure recourse must be had to the tepid or cold bath. D'Espine and Picot advise that the first bath should have a temperature of 90° to 95° F., the subsequent ones 86° F., and the duration from five to fifteen minutes, and the number of baths from one to three in the twenty-four hours. In the intervals of the baths the cold compresses may be continued, at least upon the chest and abdomen, if the fever is not reduced after the bath. Hensch recommends, according to the gravity of the case, either the warm bath, followed by wrapping in wool for several hours, which produces abundant sweating, or the tepid bath with cold affusions once or twice daily. Rilliet, Barthez, and Saané also advise the tepid bath in the acute forms with very severe nervous symptoms. Baginsky, who is a strong advocate of the cold pack to the chest, approves of the cold affusions in the tepid bath only in threatening asphyxia, and then counsels caution for fear of collapse, always giving a stimulant beforehand. Notta employs the tepid bath at 77° to 86° F., following by cool lotions or even the cold baths.

According to Hutinel, the most striking effects of the cold bath are the increase in the urinary secretion, in the saliva, and in the digestive fluids, rendering the tongue moist and promoting appetite and digestion. The typical indication for the cold bath is the coexistence of very marked general symptoms (hyperpyrexia, dyspnoea, agitation), with local lesions of moderate extent. When the lung is extensively hepatized without strong febrile reaction the cold bath does not give good results, and perhaps even favors collapse. Bad action of the heart is also a contraindication. Hutinel is inclined to think that the cold bath succeeds better in the broncho-pneumonias due to the pneumococcus, whose course is more frank, than in those due to the streptococcus, which are slower in course and of longer duration. When the temperature reaches 105½° the cold bath is always indicated. The temperature of the first bath should be 82°, and should last from five to ten minutes. The following baths may be from 75° to 65°, but never lower.