

tion, and death followed the operation, on the average, in 70.8 hours. The shortest period in which convulsions occurred after operation was 40 hours—the longest, 104 hours.

Further experiment was made by feeding two groups of animals—one pregnant, the other non-pregnant—operated upon, with the same food, when it was found that the difference in the frequency and prompt occurrence of the convulsions between pregnant and non-pregnant animals is very much lessened.

The conclusions drawn from these experiments strengthen our belief that the brain of the pregnant animal is more sensitive to irritation than that of the non-pregnant. The substances which produce convulsions exist essentially in the non-pregnant as well as in the pregnant.

One fact stands out very clearly from these and other experiments upon this subject: eclampsia is not the result of uræmia. While lesions in the kidney may assist in producing eclampsia, these lesions are the result of the circulation of poisons which in themselves cause eclampsia. Experiments show that animals, whether herbivorous or carnivorous, generate poisons in the body during pregnancy. To isolate poisons which produce eclampsia it will be necessary to isolate from the blood, the central nervous system, or the urine substances which are capable of exciting irritation in the nervous system during pregnancy.

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**Tubal Gestation.**—In the *Journal of Obstetrics of the British Empire*, June, 1902, CHAMPNEYS contributes an interesting paper upon this subject, with the results of his study of seventy-five cases of tubal gestation from the wards of St. Bartholomew's hospital.

He calls attention to the fact that more than twenty years ago these cases were diagnosed as hematocele, while later the same cases were called perimetritis. Before 1893 the diagnosis of ectopic gestation was not very commonly made. From 1865 to 1877 there were at St. Bartholomew's Hospital 129 cases in which hematocele was diagnosed, and of these five died, a mortality of nearly 3.87 per cent. During the next two years the mortality remained the same, but a smaller number of cases were diagnosed as hematocele. From 1891 to 1900 there were thirty-six cases of hematocele, of which none died. During the first twelve years the diagnosis of ectopic gestation was made six times, with one death. During the second twelve years it was made in ten cases, with two deaths; and during the next nine years in sixty-three cases, with nine deaths.

Champneys practises and teaches the following principles of treatment in these cases:

1. Cases of early, unruptured, living, tubal gestation should be operated on without delay.

2. Cases of rupture into the peritoneal cavity, with diffuse hemorrhage, should be dealt with according to circumstances.

- (a) If hemorrhage still continues when they come under observation some cases ought to be subjected to operation, taking into consideration the probability of the limitation and encapsulation of the blood continuing and the state of the patient at the time.

- (b) If seen after hemorrhage has ceased they should be treated expectantly.

3. Cases in which the blood has been encapsulated by adhesions or by the broad ligament should be treated expectantly, and operated on if pregnancy appears to be progressing.

4. Hematocoles which refuse to be absorbed in a reasonable time should be opened, emptied, and drained.

In explanation of these propositions it is recognized that it is very difficult at times to diagnose an unruptured tubal gestation. Regarding those cases which rupture into the peritoneal cavity, the death of the ovum immediately occurs; hence it ceases to be a source of danger. If the patient recovers from the shock she usually survives the accident. To operate during the stage of shock he believes is in many cases to kill the patient; to operate after the shock has ceased is usually unnecessary.

Champneys adds detailed reports of seventy-five cases which have been under his personal charge in St. Bartholomew's. The mortality of these cases was seven, or 9.3 per cent.; 45.3 per cent. of these cases were left alone, and recovered; in 20 per cent. vaginal section was done, without mortality; in 65.3 per cent. nothing was done as soon as the patient was admitted or during the active stage of hemorrhage, but later on vaginal section was performed. Immediate abdominal section was done in but 12 per cent. of the cases. Secondary abdominal section was done in 22.6 per cent., and abdominal sections, both primary and secondary, in 34.9 per cent. There were forty-nine cases, or 65.3 per cent., in which abdominal section was not done.

The mortality of vaginal sections was nothing, and the mortality of abdominal sections, primary and secondary, was 26.92 per cent. Primary abdominal sections gave better results than secondary. In the former the mortality was 22.2 per cent., and in the latter 29.41 per cent. The mortality of all abdominal sections in these cases was 9.3 per cent., or that of the entire series. Four cases were opened through the vagina under a mistaken diagnosis. Five cases were possibly operated upon too late, and there were two cases in which abdominal section was superfluous. There were twelve cases in which the tumor was larger than a cricket-ball, and three cases in which the tumor increased after admission to the hospital, but which recovered without operation. In four cases there were attacks of pain without increase in the tumor, and in two cases the hematocole was discharged through the rectum. Champneys calls attention to the fact that rise of temperature does not necessarily indicate infection of the sac.

He does not have resort to mere puncture. When opening such a tumor through the vagina he cuts through the vaginal wall, stopping any bleeding before proceeding further, and opening the cyst with the fingers, aided with some blunt instrument. After washing out the sac he is accustomed to drain with gauze.

In summarizing these cases Champneys calls attention to the fact that 60 per cent. of the whole number recover without abdominal section.

**Duration of Lactation.**—In *L'Obstétrique*, May 15, 1902, PLANCHON contributes a paper upon the duration of lactation, in which he describes various conditions in which lactation has continued under unusual circumstances.