a true cirrhosis is produced. With these changes in the blood-vessels, the circulation is interrupted to a degree that causes œdema, which increases the size of the ovary and renders it softer. Apoplexies sometimes occur, and occasionaly one or more of the blood clots may be seen near the surface. These conditions can be distinguished from a diseased vesicle by the staining of the tissues around the clot. This last-mentioned lesion occurs in the early stage of the ovaritis, and gradually disappears as the process of hyperplasia proceeds to a complete cirrhosis. These changes explain some of the important facts in the clinical history. The ovary which is found enlarged, softened and tender to the touch, will, in months afterward, appear subnormal in size. Likewise the same lesions may be recognized upon inspection after laparotomy, if one has become familiar with them by previous study.

While hyperplasia of the stroma is going on, the follicular elements undergo certain changes. The contents of the follicles become cloudy from degeneration of the epithelial elements. The gross appearance of the ovary at this time would lead one to suppose that there were a number of vesicles approaching maturity, but the uncommon number of these distended vesicles is evidence that they are abnormal.

The full value of a knowledge of the gross pathology of ovaritis can be fully estimated by those who have mistaken the normal for a pathological degeneration of the ovaries, and have removed them, to learn subsequently, through the microscopist, that they were not diseased. I well re member hearing an interesting discussion regarding cases in which one ovary has to be removed for advanced disease. The question was: Should the other ovary be left or removed if there is no positive evidence of its being diseased? Much was said, pro and con, but not a word was uttered about how to detect pathological changes which should decide the matter. The morbid appearances which aid the surgeon in deciding when to remove an ovary and when not to remove it are as follows:

Follicles which, from their size, number and dark color are evidently diseased, should be removed. Enlargement, congestion and softening from œdema, and patches of induration with irregular distention of the vessels and the evidence of small blood-clots as described above, are conditions indicating removal.

Cirrhosis, indicated by subnormal size, induration and rough surface, when found in a young subject, can be easily passed upon. But in a subject near or after the menopause, this appearance of the ovary does not decide with certainty whether there is cirrhosis or simply senile atrophic degeneration.

I have thus briefly described this part of the subject, introducing only such facts as I have obtained from observation, and which have appeared to be of possible use in guiding the surgeon. This brevity arises in part from my limited knowledge, but mostly from the hope of raising a discussion which will doubtless bring out much that we need to know. Much might be said about the influence of chronic ovaritis upon the functions of the sexual organs and the nutritive and nervous systems, but time will only permit me to say, that menstruation is often deranged, and in various ways. Dysmenorrhœa is often present, and in some the menses are retarded and scanty, while in others too frequent and profuse. When the latter condition exists, the ovaritis is more easily controlled than in patients who have a scanty flow.

The effect upon the nervous system is peculiar and marked. Depression and irritability are usually pronounced. The hystero-epilepsy which has attracted much attention from the neurologists, is really an epileptiform affection, due, in all cases that I have seen in my own practice, to ovarian disease. Ovaritis also ranks first among all diseases of the sexual organs in the causation of mental disorders.

The causation of chronic ovaritis demands a brief notice, owing to its intimate relation to the question of treatment. According to my observations, the cause which most frequently obtains is imperfect menstruation. When the uterus is undersized or flexed forwards or backwards, and the menstrual flow scanty and attended with pain, the ovaries are liable to take on chronic inflammation. This is far more liable to occur if the sexual function is perverted in this class of subjects. Specific causes, such as produce the eruptive fevers, are said to affect the ovaries; but I believe that acute ovaritis is more liable to occur under these circumstances. It is probably true, also, that gonorrhœa causes acute rather than chronic ovaritis.

The strumous diathesis (which I understand to be that condition of organization which invites tuberculosis), predisposes to chronic ovaritis, and inherited or acquired syphilis does likewise.

Much has been written about endometritis as a cause of ovaritis, upon the ground that the structure of the endometrium and ovaries have a common embryonic genesis, and the fact that the two diseases are often found together; but this is still an open question.

In regard to the diagnosis of chronic ovaritis, I refer all interested to the able paper on the subject by my esteemed friend, Howard A. Kelly, in the *Am. Jour. of Obst.* for February, 1891.

TREATMENT.

The advancement of abdominal and pelvic surgery in recent times has led to the removal of the ovaries as the most prompt and effectual treatment of chronic ovaritis. There are reasons for this upon