

time, but was perhaps not large enough to be detected; after marriage she bore two healthy children without difficulty; before I saw her she had been put to torture by the insertion of a Hodge pessary to hold up a supposed retroflexed uterus; when she first menstruated at from sixteen to seventeen she had no pain; was never very regular; three weeks before marriage had "inflammation of the bowels," brought on, she was told, by sudden falling of the womb; she was sick at the time of marriage with pains in her back and legs, and felt as if she was losing the power of her legs; she weaned her last child in March and was unwell on May 4th; it lasted six days; menses came on again June 20th, and she continued unwell until I saw her; clots passed, and something like a "little bladder" came away; she believed she had a miscarriage; she subsequently had pains across lower abdomen; pain on sitting down more about rectum; coition very painful. On examination I found a tense mass in right parametrium, dropping in towards curve of sacrum, probably ovary; uterus enlarged; erosion of os. On exploring I found the right ovary enlarged to size of an orange, and removed it; there were no adhesions; she has been in robust health since, and is as cheerful and bright as ever. In this case I removed but one ovary. In another case of ruptured ectopic gestation, I removed but one ovary and tube; the patient then bore another child; and five months ago, three years after the first operation, I removed the other side for tube disease. In other cases I have removed but one ovary, and I may here state that in all cases, unless there is marked evidence of disease of the opposite side, I intend to leave the apparently healthy structures behind. In the case of fibroid ovary just related, it would have been absurd to have removed the other ovary and thus spoil all chance of a subsequent pregnancy. If this holds good with one form of ovarian tumor, it equally applies to another. There is a very marked difference in the mental condition of patients from whom only one ovary has been removed and of those from whom both have been taken. The experience of savage nations does not tally with that of civilized people. It is said that women castrated among aboriginal tribes of the South Pacific become thin, strong,

active, and wiry, and are better able to stand fatigue. My limited experience has been the reverse of this.

There can be no doubt that removal of both ovaries produces a profound nerve change, while removal of one does not seem to produce any such change. It would be interesting to ascertain whether this change occurs equally in those in whom menstruation is and is not entirely stopped by castration.

That neither ovaries, nor tubes, nor the large plexus of nerves in the broad ligament so beautifully demonstrated by Frankenhauser some years ago, exert the sole or whole influence that produces menstruation, is proved by the case reported by Tait. In that case a supra-vaginal utero-ovario-tubal amputation was performed, and though but a small stump of cervix was left, the woman still continued to menstruate from the stump.

I wrote sometime since to my friend Prof. Gaule, Professor of Physiology, at Zurich, for some explanation of this phenomenon. We had often talked the matter over together. In reply, he says that his belief, as set forth some years ago, is that the cells of all organs retain a certain intimate connection with one another, a connection first occurring during embryo life. That is, that certain cells of the blood, of the nerves, of the glands, of the connective tissue, etc., correspond with one another because formed at the same period of time and bound together through certain prevailing structural laws. Take, for instance, the spinal cord as to its fibres. He concluded from a long series of observations that in the frog one fibre of a nerve root corresponds with eleven fibres in the spinal cord, and that these are necessary to carry on the many functions, and to provide against contingencies that may arise. In the ovaries and uterus every cell corresponds to a certain number of cells in the blood, in the nervous system, etc., that belong to the same "litter," that is, were developed at the same period of embryo life. When the ovaries and tubes are removed, these corresponding cells remain behind and give rise to certain sensations and phenomena that existed before the ovaries and tubes were removed, somewhat as neuralgic pains occur in limbs that have been amputated. Hence many cases in which ovaries and tubes are removed to