

favorable conditions, produce the symptoms of childbed fever. These micro-organisms, being once in the woman's body, so overwhelm the system by their rapid development as to produce death. No pathological changes have ever been discovered in puerperal fever differing from septicæmia in general, except in situation. Different women are affected in different ways.

According to Pasteur, the innocuous micrococci that live in the vagina become dangerous if they are developed in great numbers, and the different symptoms are to be explained by the different organs to which these microbes are carried. Some go to a gland, become arrested, form an abscess and are evacuated. Some find their way into the general peritoneal cavity and from thence into the general system. Another explanation of the difference in the symptoms is the greater power of resistance of one constitution than another. That the symptoms are, in the majority of cases, due to the introduction from without of some poison is, I think, demonstrated clinically by the fact that since the introduction of antiseptics into midwifery we hear much less of puerperal fever and its fearful results. Undoubtedly the retention in the uterus of clots, pieces of membrane, or placenta, forms a starting point in many cases. But, on the other hand, look at the bruised, perhaps torn vagina; where we have a properly prepared ground for the reception and development of these dangerous organisms, especially so in the *prima-para*.

Bacteriologists deny to-day that the woman herself can produce the poison. The germs must be brought from without to cause putrefaction and infection. We know of the existence of microbes in the vagina of a healthy woman. They however do her no harm, because the vagina and cervix are protected by their epithelium, and they cannot enter into her system. But when this protective covering is destroyed they find an entrance and may produce all the train of symptoms. If this is the case, it is our duty to prevent, by every means in our power, the introduction or development of these microbes. The altered condition of the patient's blood during pregnancy, the general plethoric condition, the increase of the colourless elements, and decrease of the blood corpuscles, the increase of the leucocytes and surplus of fibrine are strong predisposing causes to inflammatory

diseases. This poison may be brought from patients similarly affected, from decaying vegetable matter, from some of the zymotic diseases; from a dunghill, cesspool, sewer, or from stagnant water.

Dr. Goodell has lately suggested as a possible source of the poison, an infected closet on which the patient may have sat during labor for the purpose of evacuating the bladder or bowels, and he very properly warns us against this danger. The poison may be brought to the patient by the hands or instruments of the doctor, midwife, or nurse; by a sponge, or dirty, soiled rag, used to protect the bed. It will cling to our fingers under the nails, and on making the necessary vaginal examinations we introduce and deposit it in the vaginal canal, from whence it becomes rapidly absorbed.

I do not believe in the air being a medium by which the poison is carried from patient to patient. I do admit that the air in a badly drained and ventilated house, or over-crowded lying-in hospital, may become the medium; but it is because of the unsanitary condition of that particular place that the air may become so loaded with the virus as to readily infect those breathing and living in it. In speaking of the air as a medium, I allude to the air outside our dwellings, and my contention is, I think, proved by the fact that of two physicians living and practising in the same locality, one may have the disease among his patients while the other has not. The one carries the poison through the medium of his hands from patient to patient, because he fails to observe the strict rule of antiseptics. The other is scrupulously careful, and he has no cases. A living ferment, once introduced into the system, is capable of reproduction, providing the proper conditions for its development are present.

After this brief review of the nature of the disease, it remains for us to see how we can best prevent its onset and spread.

Firstly then, before making any vaginal examination, the physician should thoroughly wash and disinfect his hands in hot water and soap, with some disinfectant in it, carefully cleaning his nails. He should also be provided with some such lubricant as carbolyzed vaseline. He should have prepared a solution of perchloride of mercury of the strength of 1 to 2000, in which, before and after he has made an examination, he should immerse his hands, first washing them with soap and water.