

time after there is a safe amount of distension. Many cases of cystitis are thus set up in the sex. Now let us see how such a cause may act. Over-distension of the bladder means congestion. Over-distension leads to deficient power to expel the last drops of a urine which, from the congestion, contains mucus. The mucus decomposes. It sets up decomposition of the urea, and carbonate of ammonia is produced. This renders the urine alkaline, and therefore foreign and irritant to the coat of the bladder. Another result of alkaline urine is the precipitation of the earthy and triple phosphates, and so inflammation is set up.

The symptoms of cystitis are well marked. Frequent and painful micturition, accompanied with tenesmus of the bladder. The pain, at first local—pelvic and perineal—radiates to the navel or the breast and loins. The urine, at first pale, of low specific gravity, and acid, becomes alkaline and turbid from blood, mucus, pus and precipitation of phosphates. The disease is not always confined to the bladder. It may extend up the ureters to the kidneys, and so ureteritis, pyelitis, pyonephrosis and renal abscess result. In the bladder itself, a cystitis, at first merely catarrhal, may become ulcerative, or the inflammation may be diphtheritic or gangrenous.

The diagnosis is usually easy, but it cannot be made from the symptom of frequent and painful micturition. The urine must contain mucus, blood or pus. The conditions with which it may be confounded are irritation of the bladder from uterine displacement; irritation or inflammation, with cicatrization of the utero-sacral ligaments, other forms of pelvic peritonitis, fissure at the neck of the bladder, urethritis, and stone in the bladder. As regards most of these, it may be said that to be forewarned is to be forearmed.

The prognosis is much better than it would have been twenty years ago. In healthy subjects it is good. In the pregnant or lying-in woman, it is not so favorable. It is in such more apt to become chronic, and to leave the part weakened and sensitive. When ulceration is present, the outlook is by no means so favorable, although not absolutely bad. The tendency to hemorrhage, to extension to the peritoneum, to perforation, to extension to the kidney, to