THE CANADA LANCET.

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE, CRITICISM AND NEWS.

VOL. XXI.] TORONTO, NOV., 1888. [No. 3.

Original Communications.

CYSTITIS.*

BY W. BRITTON, M.D., TORONTO.

Idiopathic acute cystitis is rarely observed, excepting as a complication of some pre-existing malady. It is said to originate *de novo*, occasionally, in scrofulous and rickety girls in whom there is manifest a predisposition to vaginitis and other varieties of mucous inflammation. It is found as a complication of pyæmia, typhus fever, and in certain cases of the exanthemata. The gouty and rheumatic diatheses are said to be predisposing causes; although, if cystitis be in progress and a fit of gout supervene, the consequent diminution of uric acid excretion is thought to allay temporarily the bladder symptoms.

Primary acute cystitis, with the few exceptions mentioned, is probably always a traumatic disease, although the injury is often inflicted in a secondary manner. Of the direct injuries may be mentioned, calculus, lithotomy and lithotrity, the unskilful use of the sound, external blows (especially when the bladder is much distended), the prolonged pressure of the fœtal head and some of the mechanical aids to delivery; the irritating effects of ill-advised or too free use of such articles as the balsams, turpentine and cantharides may be included in the category.

All the indirect causes of traumatic cystitis may be narrowed, in their *modus operandi*, to the two elements of over-distention and retention of urine —apparently one and the same thing, but widely diverse in the transition from cause to effect. Over-distention means unnaturally violent efforts to expel and consequent hyperæmia, while prolonged retention is the forerunner of urinary decomposition and irritation — that indefinable something that is said to underlie the inflammatory process.

The causes of retention may be summed up as follows:—Congenital or acquired narrowing of the meatus, and tumors of that aperture such as frequently are found in the female; stricture, prostatic disease, especially if accompanied by hypertrophy; a calculus lodged at the neck; and atony and paralysis of the bladder, a not uncommon trouble of old people, and a complication of various forms of spinal lesion. In a subacute form, cystitis often occurs at the climax or towards the close of an attack of gonorrhœa; and, indeed, in the female, the almost constant existence of urethritis and its inclination to invade the bladder, are set down as some of the diagnostic features of specific, as distinguished from simple vaginitis. Inflammatory diseases of any of the neighboring organs may, by extension, invade the bladder; but this pertains more especially to its peritoneal covering.

Usually the disease invades primarily the mucous tunic, occasionally the peritoneum, and if it ever attacks the muscular coat, it has its starting point in one of the other two—commonly the innermost; and, indeed, this order of origin is not difficult to account for when the structure and functions of the bladder are taken into consideration. An eminent pathologist says that two-thirds of the diseases to which human kind are subject have their starting point in mucous membrane, so sensitive are its delicate cells to irritation; and in this particular instance we have to deal with an organ which is at once a receptacle for, and an instrument of expulsion of, a fluid ever varying in character and quantity according to the protean conditions of the system and its surrounding influences. It is protected from undue irritation in part by that normal vital principle that exists in healthy tissue, and in part by the constant secretion of a protective mucous coating, normal in quantity and character; it should not be distended beyond what its muscular fibres can bear without weariness; and, when expulsion occurs, exit should be so unobstructed as to necessitate only such a subdued contraction as is necessary for dilation of the outer portions of the urethra; unless it be shown that the longitudinal fibres assist also in opening the sphincter. Any wide divergence from

* Read before the Toronto Medical Society, Oct. 16, 1888.