the matter, and be productive of increased flow. 3rd. The tendency is for clots to be broken up by the urine, and unless the disease giving rise to them also produces obstructions sufficient to ordinarily necessitate the use of the catheter, they had better be left alone; but if the contrary condition exists, the urgency being extreme, they may be gently broken up with the point of a double channeled catheter and lavement resorted to, perhaps after suction has been employed. Opium as an adjuvant, will not be out of place, as it will keep the bladder in a state of rest.

4th. There is much conflict of opinion as to the efficacy of cold externally as a hæmostatic for the bladder. Sir Henry Thompson asserts that no amount of cold applied to the hypogastrium affects the temperature of the bladder, and, therefore, used in that way it is quite impotent, although, perhaps, it is more effective when applied per rectum.

Many cognate matters have cropped up in dealing with the subject under discussion, and time being limited, statements may have been made in so brief a manner as to be necessarily without sufficient qualification to save them from the opprobrium of dogmatism, therefore, I have to crave the indulgence of this meeting.

ACUTE NECROSIS OF GROWING BONE.*

BY GEO. A. PETERS, M.B., F.R.S.C., ENG., TORONTO.

(Continued from April No.)

Diagnosis.—The early diagnosis of this disease has such an important bearing upon the line of treatment to be adopted; and the frequency with which it is mistaken for typhoid fever, rheumatism, or an acute specific fever, is so great that one may dwell with profit on a few of the points involved in its detection.

The early symptoms of chill, followed by fever, vomiting, with more or less obscure pains in the back and limbs, are common to this and many other diseases of childhood, and accordingly do not aid us much in arriving at correct diagnostic conclusions. The malignancy of this disease, however, is such that even in the early stages the rapid depression of the vital forces is perhaps greater than in any of the other diseases of childhood. Symptoms of great depression then should lead us to make a careful examination of all parts of the body, and I would suggest that in all cases of disease in growing subjects, attended with grave symptoms, acute necrosis is one of the diseases which should be borne in mind in summing up the whole clinical aspect of the case preparatory to making a diagnosis. It must ever be remembered that young children are frequently conscious of extreme pain, and yet have only a vague idea of its exact localization, and so pain in an epiphysis might readily be referred to an adjacent joint. Again, cases of multiple acute necrosis have been described by Senn.* Such cases—particularly if complicated with synovitis of the neighboring joints, as may be the case—would be distinguished from acute articular rheumatism with the utmost difficulty. Moreover, the case related in this paper substantiates the observation of others—that the two diseases may be present in one individual.

Under the heading of the Diagnosis of Rheumatism, Fagge† refers to several cases of acute necrosis which were treated for rheumatism, the mistake not being discovered till the patient came to the *post-mortem* table. The most reliable points in the exclusion of rheumatism are the absence of the characteristic sour acid sweats, the great depression which is present, and the localization of the pain and tenderness—not *in* the joint but near it. In fact, if I were asked to name a crucial point in the diagnosis of this disease, I should say the presence of acute pain and excessive tenderness in the vicinity of an epiphyseal line. In a very early stage, even before the periosteum is affected to any extent, a very distinctly circumscribed tender spot may be found. At this time, as there may not be any affection of the periosteum, there will not necessarily be any increase in the circumference of the limb, but when a collection of pus occurs under the periosteum there should be no longer any difficulty in arriving at a diagnosis. Even at this stage, however, it has been mistaken for cellulitis or phlegmonous erysipelas, but these conditions are rare in childhood.

From the acute specific fevers and typhoid fever the disease will be distinguished by the local

* Read before the Ont. Medical Association, June, 1891.

† Op. Cit. p. 236.

‡ Fagge's Practice of Medicine, Vol. II., p. 566.