

action, and of increasing the efficiency in certain cases of the application of small or medium doses.

6. The innocuous character of his intra-uterine electro-therapeutics is demonstrated by comparing it with those of the chemical and operative intra-uterine methods of treatment, and particularly by comparative statistics. Dr. Apostoli made from July, 1882, to July 1890, 11,499 galvanic applications, as follows:—8177 positive intra-uterine galvano-caustic, 2486 negative intra-uterine galvano-caustic, 222 positive vaginal galvano-punctures, 614 negative vaginal galvano-punctures. He has treated 912 patients, comprising 531 fibroids, 133 cases of simple endometritis, and 248 of endometritis complicated with peri-uterine inflammation.

Of these 313 fibroids, 70 cases of simple endometritis, 163 of endometritis complicated with peri-uterine inflammation occurred in the clinique, and 218 fibroids, 63 cases of simple endometritis and 85 complicated, with peri-uterine inflammation, occurred in private practice. He has had three deaths attributable to operative defects. Two galvano-puncture, of which one was for a subperitoneal fibroid, the other for an ovaro-salpingitis, and one galvano-caustic application for a cyst of the ovary, mistaken for a fibroid.

He has observed 30 cases of pregnancy which occurred after intra-uterine galvanic applications.
—*The Lancet*

EARLY DIAGNOSIS OF SOME SERIOUS DISEASES OF THE NERVOUS SYSTEM; ITS IMPORTANCE AND FEASIBILITY.

VERTEBRAL DISEASE (CARIES, ETC.).

It may seem strange that I should call your attention to conditions which apparently belong to quite a different specialty from neurology; but, gentlemen, the first and the last symptoms of these diseases (spondylitis, caries of the spine, vertebral cancer) are nervous symptoms. The case appears at first as one of rebellious neuralgia or muscular rheumatism, and lastly as one of paraplegia. The early symptoms do not very distinctly point to the vertebræ as the site of disease; and thus usually the cases remain a long time—during the best time for successful treatment—in the hands of the general practitioner; then, later, they are passed on to the neurologist or orthopedist.

Many precious months are thus lost. Yet, if the few symptoms present during the first stage of these diseases are rightly appreciated and correctly interpreted, I believe a diagnosis should always be possible long before angular curvature (representing the breaking-down of one or several vertebræ) or tumor appears. The early symptoms of spondylitis or tumor are the same in *kind*, no matter what part of the spine is affected, but their

distribution varies according to the location of the lesion up or down in the vertebral column. This distribution is so peculiar as to enable us to tell with almost absolute certainty which vertebræ are affected.

The capital symptoms of the first stage of Pott's disease or of vertebral cancer are only two in number, namely: (a) a fixed pain seemingly of a neuralgic character, far away from the spine. (b) Rigidity of certain muscles attached to the spinal column; a reflex protective or conservative spasm. The distant pain is increased by attempts to overcome the muscular spasm, and by jars.

It will be necessary to consider these symptoms as distributed when the disease (caries, tubercle or cancer of the vertebræ) attacks different regions of the spinal column.

(a) The "neuralgic" pains, and spasm.

(1) Disease of the uppermost cervical vertebræ, spondylitis colli, is not rare. The patient complains in the first place, and chiefly of pain in one occipital region, aggravated by motion or jar. On analysis, we find the pain to follow the range of distribution of the greater and lesser occipital nerves; one or both. Occasionally there is also pain in the temple of the same side. Almost invariably this neuralgic pain for which the patient asks relief, is unilateral.

Inspection reveals at quite an early period, a slight or decided "wry-neck," a deviation of the head from its proper vertical position. It is a peculiar oblique attitude, dissimilar from that produced by (functional) spasm of one sterno-mastoid. Any attempt to correct this deviation, and indeed any passive movement of the head and neck cause greatly increased pain in the occipital region (not in the spine). Sudden pressure on the top of the head by the physician's hand causes excruciating pain of similar distribution. The spine itself is not tender or deformed. The patient tells you that the jar of a carriage or horse-car, or of a false step, causes intense agony. Some patients very early acquire an instinctive habit of supporting or steadying their heads with their hands, to avoid effects of shock. Further examination shows that the deeper cervical muscles, extensors, flexors, and rotators are in a state of constant spasm, more especially on the side of the pain.

Let us see if anatomy helps us in diagnosis. The occipitalis major nerve is mainly a branch of the second cervical nerve; the minor, of the first cervical nerve. They, however, have branches of intercommunication. Most filaments of these nerves are sensory, supplying the scalp of the occiput and parietal regions. Motor fibres from these two cervical nerves supply the small, deep muscles which govern the movements of the skull upon the vertebral column.

Consequently, both the "neuralgia" and the spasm point infallibly to disease in or about the