

across the abomen, with difficulty of micturition, and pains and weakness of the lower extremities. These are facts which a knowledge of the functions of the voluntary system of nerves enables us to explain, and to consider as resting on admitted data.

And perhaps the recent investigations of Valentin may throw additional light on this subject, and explain how some of the organic functions of the body may be influenced in these affections. This inquirer has shown, by numerous experiments, that irritation of the spinal cord affects the movements of the œsophagus and viscera of the abomen, through the medium of the sympathetic system of nerves; that in this manner contractions are produced in the stomach by irritating the roots of the lower cervical and first thoracic nerves; and that, by irritating the roots of the dorsal nerves, or of the lumbar or sacral, corresponding portions of the intestinal tube are affected. In short, the researches of Valentin show, that by means of the communication that exists between the fibres of the spinal and sympathetic system of nerves, irritation of the spinal cord affects the movements of the viscera of the abdomen. It is very probable, therefore, that on this principle may depend much of the pain and suffering connected with these functions of the body in diseases of a spinal character,—that irritation at the origin of the spinal nerves, communicated through the medium of the sympathetic, may influence the functions of the stomach and other abdominal viscera, and produce many of those symptoms which we witness in these affections.

One circumstance, then, particularly to be attended to in this class of diseases, is, that the most prominent and characteristic symptoms may be manifested in various parts of the body at a distance from the seat of the affection. Thus pains are felt at the extremities of the nerves, whilst the cause is connected with their origin; and the symptoms often appear so anomalous as to prove most perplexing to the physician, whilst, at the same time, they are most distressing to the patient. The sensibility, in some parts of the chest, may be so much increased, that the patient shrieks when it is touched, and can scarcely bear the pressure of the clothes on it. The integuments swell, and become acutely painful even on the pressure of the finger. There is often great pain, with irritability of the stomach,—pains and attacks like spasms in the bowels, accompanied with dysuria. There may be a feeling of tightness extending along the margin of the ribs, and affecting the power of respiration; or there may be weakness, with a sort of prickly sensation in one side of the body. In some cases, which the author of this paper investigated in the French hospitals, sensation was greatly impaired in one side of the body, whilst the motor power remained unaffected. In others, sensation appeared to be diminished only in a small part of the body, as in the integuments of one side of the chest, whilst the patient complained of general lassitude