

While it is certain that the muscular action producing the movements, was that of clonic spasms, the particularization of the muscles engaged, admits of speculation, so that as determinative, I offer the following, which has been founded upon a correspondence of effects from known causes with the phenomena :—

The elevations or bowing forwards of the head and neck, were of three degrees; in each there was a simultaneous contraction of the sterno-mastoid muscles, which in the slighter existed singly, but in the greater, jointly, with those of the sterno-hyoid, sterno-thyroid, thyro-hyoid and omohyoid, which bend the neck, and offer points d'appui for the digastricus, mylohyoid, geniohyoid and geniohyoglossus, which acted, producing with bowing of the head and neck, depression of the lower jaw. In the maximum, all the above having greatly contracted, such a fixture of the head and neck would have resulted, that further contraction of the sterno-mastoids occurring, the capacity of the thorax would have been enlarged, and a sudden inspiration produced. The phenomena consisted of constant and occasional portions; the former being due to the sterno-mastoids, the latter to the deeper muscles, which, while they made it, contributed to the former, and may have been due to an extension of nervous impression.

The regression or backward return of the head and neck, was due to the relaxation of the muscles which had moved them forwards, and to the normal action of the muscles of the back of the neck and head, for these were not convulsed, as the forehead was never rapidly brought behind the mesian line, nor the chin elevated.

The absence of local pain shews the origo mali to have been in a motor nerve, and it would seem from the preceding, that the contractions always arose from implication of the spinal accessory nerve, the most numerous from this only, and the most forcible from the coadjuvancy of the branches of the cervical plexus, which communicate with the spinal accessory in the sterno mastoid, and both before and after it has perforated it. Thus the irritation left the spinal accessory nerve, shortly after that nerve leaves the sterno mastoid, and was reflected along the cervical nerves, which communicate with it.

As some medicines act by nervous agency, the instantaneous effect of the draught in subduing the phenomena, may be explained by an antispasmodic impression made by it on the final branches of the pneumogastric, which are distributed to the stomach, having been transmitted to the sensorium, and thence along the spinal accessory, and the nerves communicating with it, which supplied the offending muscles. External applications

to the neck were useless, probably because they could not act by reflexion along the proper nervous course, so that they were not used during my second attendance, and were soon abandoned during the first, when the case did as well without as with them. The efficacy of ol Terebinth in the neuroses, and the supposition that if latent verminatio existed, it would have been anthelmintic, urged its use; but as it was inoperative, it does not need further attention. Independently of the good from ol croton, by its more ordinary effects, I believe that it was beneficial as a counter-irritant in the stomach, as it always irritated it very much, and after this, abatement and declension of the spasms ensued, so that an irritation exemplified at the periphery of branches of the spinal accessory and cervical nerves, was controlled by that at the periphery of the pneumogastric. In the first attack, the return of the spasms after the operation of the oil, was consequent upon gross dietetic errors. In the second attack these were avoided, and the recovery after the oil was uninterrupted. These views, moreover, tend to exhibit the development of the complaint, by shewing that impressions from gastric derangement applied to the gastric branches of the par vagum, could be conveyed to the spinal accessory, effect its excitability, an augmentation of which gave this affection its character. That there was derangement of the stomach is evident from its state before, and during the existence of the disease, and from the efficacy of alterative medicines upon it. This mode of development assimilates the case to those diseases of the trunk, and extremities which Hoffman, Boerrhave, and indeed others, both before and after them, pointed out, as arising from disorders of the digestive organs, affecting different portions of the medulla spinalis.

From the preceding, the conclusion follows, that this case was one of hysteria, exhibiting itself as unilocal convulsions of voluntary muscles, by involving certain nerves of animal life at the instigation of an eccentric cause.

ART. LXIII.—EXPERIMENTS WITH STRYCHNIA ON A HORSE.

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The horse experimented on was 24 years of age, in good health and spirits, the property of Mr. Mason, V. S., who was desirous of killing him for the purpose of making a skeleton, as well for pathological as anatomical purposes, as the animal had suffered some years ago from certain diseases implicating some of the joints of both the fore and hind extremities. Mr.