CLINICAL ARTICLES.

DISEASED CONDITIONS OF THE ŒSOPHAGUS—
TWO INTERESTING CASES.

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Case I.

AN eight-year-old bay mare was brought to the College Free Clinique showing the following peculiar symptoms, which had been noticed continuously for five weeks. When fed on hay the mare swallowed two or three times, then gave a slight cough, and proceeded to emit food in a slimy condition from both nose and mouth. After a brief pause she would resume eating, and after a varying interval (one to ten minutes) would again cough and void food from nose and mouth. The food ejected could be seen to travel up the œsophagus, presumably from the stomach. Sometimes a whole feed would be taken and retained until, a few minutes after the whole had been swallowed, a fit of coughing would come on and a varying amount would be ejected by both nose and mouth. Sometimes as much as a quart of material would be returned in this way after eating a bran mash. The kind of food did not appear to make much difference, but water was returned almost immediately, without any coughing, the mare continuing to drink whilst a steady stream poured from the nostrils. Urine and fæces of ordinary consistence were passed in normal quantities, and were in no respect remarkable.

The mare was very poor and getting weaker; but, except for the above condition, she appeared quite healthy, and temperature, pulse, and respirations were normal. No history of the onset of symptoms could be obtained, as the owner had only bought the mare five weeks before, and the abnormal condition had been noticed throughout that time.

On the first occasion of seeing the mare no definite diagnosis was made, but two suggestions were advanced as to the cause of the condition, viz., (1) a dilatation of the œsophagus in the chest, with lodgment of food in the pouch, and then ejection due to subsequent irritation; (2) an irritable, diseased condition of the pylorus (possibly a malignant growth), with irritation and pain when ingesta commenced to pass from stomach to bowel, and so vomition. In view of the possibility of this latter condition, opium was given for three days, and only soft demulcent food was allowed, with tepid water to drink.

On the second visit to the College no improvement could be reported; and, as the owner was tired of keeping the mare, and no

very favourable prognosis could be offered, it was decided to keep the animal under observation for three or four days and then destroy her. During four days the symptoms above described were noticed; the probang was easily passed without result. As no change occurred, the mare was then killed.

Professor M'Fadyean made a careful *post-mortem* examination, but, strange to say, no structural changes were found in any part of the alimentary tract. To all appearance the mouth, pharynx, larynx, trachea, œsophagus, and stomach were perfectly normal. The nasal chambers were opened, but nothing could be found there to account for the symptoms shown. One condition alone afforded room for an explanation, viz., the remarkable manner in which the œsophagus contracted after the animal had been killed. These contractions were noticed occurring from ten to fifteen minutes after the mare was knocked down, and they increased in force and duration whenever the cardiac orifice was touched. On opening the stomach and passing the finger over the cardiac sphincter into the gullet, a strong wave of contraction passed up the whole tube from below upwards, *i.e.*, in the direction contrary to that of the act of swallowing. During this contraction the gullet became almost as hard and rigid as a piece of tendon. This condition appears to furnish a possible explanation as to how the food was returned, namely by irritation of the cardiac sphincter, reflexly causing reversed peristalsis of the œsophagus. What the primary cause was, it is quite impossible to say.

Case II.

The subject of this case was an aged bay gelding, in very poor condition, weak and sluggish, but eating well. The owner stated that he had had the horse between three and four weeks, and that during all that time the animal had shown the following symptoms. A slight difficulty in swallowing, slow feeding, and water returned at once by both nose and mouth when the animal drank.

At the College the horse was tried with food, and swallowing appeared to require extra muscular effort and contraction of the neck. As had been described, water was at once returned by nose and mouth, but food was retained.

On examining the œsophagus in the neck a very slight swelling was noticed about the middle of the cervical portion. The probang was passed by a student, who reported "all well." Having regard to Case I., it was decided to keep the animal in the College for observation.

On examining on the second day (just after feeding) the swelling on the track of the œsophagus in the middle of the neck was quite distinct, and even more so after clipping off the hair. On subsequent examinations this swelling was found to vary with the length of time since the horse had fed, being large and well-marked just after a meal, and gradually going away. All the symptoms now seemed to point to dilatation of the œsophagus with a constriction beyond, and, to confirm this view, the animal was cast and the probang again passed. The instrument went easily enough down to the swelling, but here the "grasping" or "gripping" of the œsophagus on the knob of the probang was lost, showing that the tube was dilated, while beyond the swelling some amount of force was necessary to push the instrument past an undoubted constriction.

As no measures likely to relieve such a condition were thought possible, the animal was allowed up and sent home.

The most likely cause of the abnormality was thought to be some old injury to the muscular fibres of the œsophagus, probably as the result of passing a probang or some rough instrument for choking, the injury being repaired by fibrous tissue, which had undergone contraction and led to constriction of the tube.

It is interesting to compare the symptoms in these two cases, although the second case in no way clears up the mystery of the first.

A TROUBLESOME CASE OF ACTINOMYCOSIS.

By C. A. POWELL, M.R.C.V.S., Woburn.

THE patient, a shorthorn steer about eighteen months old, was first seen by me on the 25th of April last, and found to be suffering from actinomycosis, evidently of long duration.

The disease involved the whole of the tongue, which was badly indurated, and simply one mass of ulceration. The underlying tissues were also involved, and there was extensive swelling of a hard character in the submaxillary space. The animal had been noticed "dribbling at the mouth" since the previous November.

Treatment was commenced the next day, and consisted of hydrarg. biniodi grs. vj given twice daily. This was continued for a month, when, but little improvement being manifest, iodide of potassium in ʒij doses given twice daily was substituted. This was continued until 1 lb of the drug had been administered; then, as great improvement was shown, though recovery was far from complete, hydrarg. biniodi was again given, and continued until 9th August, by which time the animal had perfectly recovered. The tongue was covered with cicatrices, but had otherwise resumed its normal condition. Since this I have had several opportunities of seeing the patient, but there has been no recurrence of the disease, and the animal is now (30th January 1902) being stall-fed for the butcher. I may add that the animal lay out at grass during the whole of the treatment.

Actinomycosis in this district is fairly prevalent, and I simply record the above in order to show that apparently hopeless cases of the disease, providing the bone or cartilage is not affected, will recover if treatment be persisted with.

INTESTINAL IMPACTION DUE TO THE PRESENCE OF FINE SAND.

By the Same.

IN these days of short keep, more especially on sandy soils, the following notes may perhaps prove of interest in showing what may be an occasional cause of gastro-intestinal trouble in horses that are lying at grass during the winter months.

The patient, a bay carriage mare, seven years of age, had been