Peroperative mesh obliteration of epiploic foramen to prevent recurrent entrapment.

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Entrapment of small intestine into the epiploic foramen (EEF) represents an important cause of strangulating small intestinal obstruction (SSI). Both the short and long-term prognosis seem to be less favourable than for other types of SSI. The aim of the study is to report a technique of mesh closure of the epiploic foramen (EF) during emergency coeliotomy and to report shortand long-term outcome of horses operated for EEF with mesh closure. A polypropylene net was rolled and fixed by one stitch to obtain a cone coated with a piece of resected omentum and inserted into the EF from the medial to lateral side at the end of the laparotomy. 12 horses with a mean age of 10 years suffering from EEF (one horse 3rd time within 6 months) underwent surgery for correction of entrapment and mesh closure. Post-operative complications (mainly paralytic ileus) occurred in 5 of the 12 horses. One horse was euthanized due to recurrence of severe colic (volvulus). Necropsy confirmed the mesh remaining in the EF. Long-term followup from 6 months up to 5 years was available in 11 horses and the outcome was favourable in 11 horses. One horse had an exploratory coelioscopy 5 months after surgery (due to another cause of recurrent colic, recurrent large colon displacement in the reno-splenic space) and fibrous closure of the EF was confirmed. One horse was euthanized 3.5 years after mesh placement due to unrelated reasons and the fibrous integration of the mesh in the EF was shown at necropsy. Mesh closure of EF during emergency coeliotomy avoids additional surgery and prevents recurrence of EEF in horses.