Post operative ileus (POI): Another perspective

Merritt and Blikslager (2008) present an excellent challenge to re-examine attitudes towards definition and diagnosis of post operative ileus (POI) in horses. An intriguing aspect of this complex disease is that diagnosis is made largely on the basis of reflux through a nasogastric tube. This is tantamount to diagnosing navicular disease on the observation of a forelimb lameness or pneumonia because of an elevated respiratory rate. Of course, other signs offered to support the diagnosis of POI are reduced faecal output and absence of intestinal sounds. However, these 2 findings can be attributed in part to reduced perioperative food intake (Tasker 1967; Freeman et al. 1989; Naylor et al. 2006) and associated decrease in gastrointestinal tract motility (Ross et al. 1990). Therefore, post operative reflux is a clinical finding and should be regarded as such in each case until a cause is established.

Often overlooked in discussions of equine POI is the contribution from mechanical factors. In 3 studies, high heart rate, high PCV, small intestinal involvement, increased duration of anaesthesia and increased duration of surgery emerged as significant risk factors (Blikslager et al. 1994; Roussel et al. 2001; Cohen et al. 2004). These are clearcut markers of the severity of the primary disease and of cases with the most complex surgeries. In addition, these horses are at greatest risk of developing mechanical obstruction from a surgical complication or error, the primary disease and of cases with the most complex surgeries.

The current explanation of pathogenesis for POI is that selective manipulation of the small intestine causes sufficient inflammation in the intestinal muscle layers and myenteric neural plexus to disrupt motility (Schwarz et al. 2004; Little et al. 2005). This theory is supported by the coincidence of substantial serosal inflammation with the onset of post operative reflux at approximately 18 h after surgery (Little et al. 2005). This interval could, however, just as readily represent the period required for sufficient fluid build-up, proximal to an incomplete mechanical obstruction, to produce reflux. Horses that undergo a successful foramen in horses: 68 cases (1991-2002). J. Am. vet. med. Ass. 225, 1070-1078.

References


