If Only They Could Talk

Our regular focus on equine health. This month CHARLIE JOHNSTON discusses the problems faced as new young horses enter the yard.

ALTHOUGH things are now beginning to slow down on the racecourse as another successful season draws to a close, October and November are still very busy months at Kingsley Park as the yard goes through a transitional phase, with older horses leaving us for the horses-in-training sales and yearlings entering the yard from many different sales and studs around Europe and America.

The logistics of this can prove tricky as we want to keep the incoming yearlings away from the horses in the yard that are still running, but we are fortunate that at Kingsley Park we have enough space and barns to isolate the yearlings as they enter the premises. This is necessary as the movement of a variety of horses into the yard from a number of different places creates a high risk of an outbreak of disease to some level.

With a large number of yearlings arriving into a close environment from a number of different places, a substantial percentage of them will develop a respiratory infection at some point during their first few weeks in the yard. They are young, naïve animals whose immune systems will only have been exposed to certain bacteria and viruses and therefore there will be a proportion of infectious agents they have not come into contact with before.

The likelihood of them succumbing to these infections is increased by the fact that the stress of moving into a new environment, as well as the workload of the breaking-in process, will have an immunosuppressive effect. In the case of these young racehorses they will most commonly succumb to a herpes virus infection which is always present at low levels throughout a horse population.

The virus is spread by direct contact with a horse that has an active virus or by viral spores that exist in the environment. These horses will normally present with an elevated temperature, reduced appetite, a dull demeanour, coughing and nasal discharge. This nasal discharge will initially be of a clear, watery consistency, but after a couple of days this will change to a whitish colour which is indicative of the presence of inflammatory cells. It is quite common for the horse to develop a secondary bacterial infection 4-5 days after the initial clinical signs when the horse may then have a thick, yellow nasal discharge.

These infections are usually not serious and will resolve over a 2-3 week period and horses will develop some immunity through repeated exposure to the virus, therefore mature horses will not develop serious respiratory disease if they encounter the pathogen again.

To try to diagnose these infections as early as possible we monitor our yearlings’ temperatures every day and if a horse presents with an elevated temperature, the breaking process is put on hold and the horse is reduced to walker exercise until its appetite and demeanour improve and its temperature returns to normal.

In the most serious of infections, when the horse does not recover swiftly, it may be necessary to take blood samples to gain an understanding of the inflammatory processes going on within the horse. A tracheal wash can be performed to collect fluid from the horse’s lungs. The sample is cultured to identify the offending bacteria and an anti-microbial sensitivity test is carried out to establish the correct treatment.

Rarely (on average we have one case each winter), these infections will lead to a horse developing pleuropneumonia where the infection in the lungs spreads to the pleural space. The immunosuppressive effect of their infection causes a breakdown in the normal defence mechanisms of the lungs, leading to colonisation of the lower airways by oropharyngeal aerobic bacteria such as Pasteurella, E coli and Enterobacter.

These horses will present with a fever, depression and lethargy on a much more profound level than those suffering from a routine viral infection. They may also present with increased respiratory and heart rates as well as an increased respiratory effort. Coughing and nasal discharge are common presenting signs as well as in some cases a sternal oedema.

The clinical signs are normally quite indicative of a case of pleuropneumonia but the diagnosis is confirmed by blood analysis showing a marked acute inflammatory profile and auscultation of the chest where there may be increased lung sounds in dorsal (higher up) lung fields and reduced or absent lung sounds in ventral (lower down) fields.

The definitive diagnosis is made by ultrasonography of the lungs where fluid can be seen in the lung parenchyma or pleural space as well as the presence of consolidated lung tissue. This is not always straightforward though as ultrasound scanners do not have the capability to assess the deepest lung tissues, therefore sometimes the diagnosis has to be made without being able to localise the fluid on ultrasound.

These cases require intensive management and if the fluid can be located on ultrasound, substantial pockets can be drained.

Aggressive broad spectrum antibiotic and anti-inflammatory medication is required and the sampled fluid should be sent for culture and sensitivity to identify the specific bacteria involved allowing the choice of antibiotics to be adjusted. At some point these horses may require intensive care such as IV fluids or anti-endotoxic therapy.

The prognosis for survival is reasonable, but on occasions this condition can be fatal. Horses that do survive have a good prognosis for returning to race, regardless of the duration of the illness. Although if the horse has gone on to develop a pulmonary abscess or large areas of the lung field have become consolidated, then the prognosis for racing is somewhat poorer.

Here at Mark Johnston Racing, we have experienced full-time vets who keep a close watch for any sign of infection and implement the necessary treatments. All veterinary fees are covered in the MJR inclusive daily training rate.