

Foal Critical Care: 2009 Irish Version-Michelle Dicken

I very fortunate to receive funding from the NZERF towards a trip to Ireland in April and May 2009 to study new trends in foal critical care. The following is a brief summary of the information I gained during my time there.

In April and May 2009 I spent four weeks at Anglesey Lodge Equine Hospital, The Curragh, County Kildare working with Kevin Corley who is a Specialist in Internal Medicine and Critical Care and Anna Hollis who is the Intervet/SPAH Scholar in Equine Emergency and Critical Care. The recession had affected the equine industry quite badly in Ireland and the foal numbers seen at the hospital were down in April (18 compared to 33 in 2008) but in May the numbers were back to normal (41 compared to 46 in 2008).

The first thing I noted was that a very thorough and concise admittance form had been developed with all the critical information easily recordable. This also meant that the data could be easily analysed for research work. A blood sample was taken from the foal as soon as it arrived so the onsite laboratory could be running haematology, biochemistry and lactate while the history and physical examination was taking place. Ultrasound examination was used routinely and a lot of information was gained in this way, again very rapidly. All this information together could be used to give a prognosis, cost estimate and to develop a treatment plan.

Three areas of new developments in foal critical care were fluid therapy, laboratory tests and antibiotics used.

Fluid therapy

Foals do not have the same cardiovascular response to hypovolaemia as mature horses so hypovolaemia in foals is very serious and also can be difficult to assess. At Anglesey Lodge the initial assessment of the foal would lead to the giving of a fluid bolus of between 1 to 4 litres of Hartmanns. This depended on the assessment of the foal and on continuous monitoring. The maintenance fluids were given afterwards with glucose being given separately (rather than mixed in the same bag) so the rate of infusion of each could be altered independently.

Laboratory tests

Lactate measurement was used a lot as well as serum amyloid A levels but new laboratory tests that were being used were levels of bile acids, magnesium and triglycerides. Increased triglyceride levels indicate a negative energy balance and this would correlate well with NZ findings of foals that had died by 48 hours having no fat reserves on post mortem. Bile acids are an indicator of liver function and there will be a paper coming out on bile acid levels and how liver function is affected in sepsis which is also very interesting new research.

Antibiotics

I saw several different antibiotics being used in foals. A new antibiotic was cefquinome, a fourth generation cephalosporin which was given 3 times a day or as a continuous infusion. Marbofloxacin was used in foals and no adverse effects had been observed at the time. Florfenicol was another drug which was interesting to see being used in foals.

Since my return I have presented a paper on the Critical Care of Foals: Irish Version at the practitioner's session at the NZEVA conference in Taupo. I will also be giving a talk at a Local Practitioner's Meeting in Otaki on Stabilising the Sick Foal. I am looking forward to the foaling season beginning here. It has been very useful to learn first hand the new developments in the critical care of foals.

