

## February 2010

### BNP—Bovine Neonatal Pancytopenia



At a recent evening meeting at VLA Thirsk, Ben Strugnell gave an excellent update on this newly emerging condition of calves less than a month old. So far, there have been 43 confirmed cases in Scotland, 58 cases in England, just a single case in Wales and two cases in Northern Ireland. Anecdotally, there appear to be four clinical presentations:

- ◆ Sudden death, internal haemorrhages/petechiation
- ◆ Calves that bleed from every orifice/injection site, appear unwell, then die in around 48 hours
- ◆ Calves that bleed, appear well otherwise, but die
- ◆ A small number of calves that bleed but then recover

Blood tests on affected calves show neutropenia, lymphopenia, thrombocytopenia ( $<20 \times 10^9/l$ ) and anaemia— ie pancytopenia. Bone marrow biopsies reveal a dramatic depletion of white cell, red cell and platelet precursors. **To date, no infectious cause has been identified despite exhaustive testing.**

A particularly severe outbreak in Italy gave a clue as to a possible aetiology. A farmer fed

colostrum from one cow to 11 calves, 8 of which died from BNP! It then transpired that the cow had produced an affected calf the previous year.

**The current theory is that BNP is an alloimmune response caused by a soluble factor in colostrum resulting in rapid cytolysis.**

Recent work has suggested that the vaccinal history of the cows producing affected calves may be relevant and the Veterinary Medicines Directorate wish cases to be reported as Suspect Adverse Reactions.

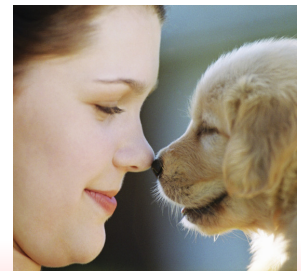
Although there was some initial concern about possible zoonotic potential, reassuringly, there has been no increase in the number of cases of aplastic anaemia in humans recorded. In practical terms, if you are faced with a potential case:

- ◆ Take an antemortem EDTA blood sample if possible
- ◆ Contact your local VLA to arrange a post mortem (FOC if the case meets all criteria)
- ◆ Record vaccinal history of the dam & contact the VMD

Regarding colostrum feeding: **Colostrum from the dam of the affected calf must not be fed to other calves and the problem is likely to recur in future with that cow.** Ideally, colostrum should only be fed from each cow to her own calf. It was stressed at the meeting that the risks of not feeding colostrum are, overall, much greater than the risk of BNP.

### Faecal Pathogens in Puppies

Over the past few weeks we have once again had a 'run' of diarrhoeic faecal samples at NWL Leeds from recently purchased puppies that have proved positive for multiple zoonotic faecal pathogens. A common combination is giardiasis with campylobacter infection and one poor pup had a serogroup D salmonella too! *Toxocara canis* and coccidiosis are also frequent findings.



Ideally, three pre-treatment faecal samples collected over at least 48 hours should be submitted for pooled testing to adequately screen for faecal pathogens—see page 24 of the NWL brochure for details of test packages.

### NWL Clin Path Club



The next meeting will be at The Marriott Hotel, Preston, at 8.00 pm on 25 Feb 10, refreshments provided from 7.30 pm.

Dr Mark Stidworthy from the International Zoo Veterinary Group will speak on



**Exotic medicine**



**—a pathologist's perspective**