Proceedings of the 16th
Italian Association of Equine Veterinarians
Congress

Carrara, Italy
January 29-31, 2010

Next SIVE Meeting:

Feb. 4-6, 2011 – Montesilvano, Pescara, Italy

Reprinted in the IVIS website with the permission of the
Italian Association of Equine Veterinarians – SIVE

http://www.ivis.org

H. D. O’Neill, MVB MRCVS
B. Bladon, BVM&S CertEP DESTS DipECVS MRCVS, RCVS & European Specialist

1Large Animal Clinical Sciences, College of Veterinary Medicine, University of Michigan, East Lansing, USA
2Donnington Grove Veterinary Surgery, Newbury, United Kingdom

Topic: Orthopaedics

Purpose of the work. There is limited published information regarding the distribution of enostosis-like lesions in the horse and its possible cause of lameness. The objective was to review and report the findings of a retrospective study of 21 horses admitted to a private equine referral hospital over an 8-year period (2000 – 2008), with enostosis-like lesions that were confirmed both on radiographic and nuclear scintigraphic examination.

Materials and used methods. Hospital records were analysed and information pertaining to patient signalment, presenting complaint and diagnostic findings were all recorded. The diagnosis of enostosis-like lesions was based on the identification of discrete, focal or multifocal, intramedullary areas of increased radionuclide uptake, invariably found around the nutrient foramina of long bones. Radiographically, these areas are confirmed as irregular to ovoid shaped radiopacities closely associated with the endosteum and vascular channels within the medullary canal. The number, location and distribution of enostosis-like lesions were recorded.

Race performance records were reviewed for those Thoroughbred patients pre- and post-examination using the online Racing Post® database. Follow up information was obtained through a telephone questionnaire of owners and trainers regarding those horses that did not go onto compete following investigation.

Outcomes. Of the 21 horses presented, 17 were TBs, 12 of which were National Hunt racehorses and 5 were Flat racehorses. The remaining four horses were used for general purpose riding (n = 3) and showjumping (n = 1). A total of 68 individual enostosis-like lesions were confirmed in 57 long bones from 21 horses. 5 horses were subject to repeat examinations at later dates, 4 of which showed the occurrence of new lesions in the same or different limb(s). Seventeen of the 21 horses were males. Lesions were unequally distributed between the fore and hind limbs with over twice the number identified in the hindlimb (n = 46 foci) when compared to the forelimb (n = 22 foci). The lesions were identified in the diaphysis of 22 tibiae, 14 radii, 13 third metatarsii, 6 humerii and 2 femurs. Lameness attributable to enostosis-like lesions was thought to occur in 19/25 (76%) separate presentations. Follow up information was available on 18 of the 21 horses. With the exception of 1 horse, all cases had returned to soundness after a variable period of rest and controlled exercise programme.

Conclusions. Enostosis-like lesions can be associated with a variable degree of lameness in the horse, but clinical findings and diagnostic analgesia will often not precisely locate the site of the lesion. Confirmation of a diagnosis is with the combined use of nuclear scintigraphy and radiography, and after exclusion of all other major musculoskeletal conditions. Whilst most lesions are self-limiting, some cases do recur in an unpredictable manner.

The description of enostosis-like lesion distribution and clinical presentation should facilitate a more accurate diagnosis of the condition in the future. Further investigation is necessary to determine the aetiopathogenesis of enostosis-like lesions so as to provide a more effective method of prevention and management of the condition.
Bibliography


Address for correspondence:
Mr. Henry O’Neill - University Of Michigan Large Animal Clinic Sciences, College Of Veterinary Medicine, East Lansing, Michigan, 48824, United States
E-mail: oneillh@cvm.msu.edu