

What is your Diagnosis?

Progressive lameness in a dog

Case history

A 4.5-year-old spayed female German Shepherd was evaluated for a three-month-history of progressive lameness involving the right pelvic limb. Swelling of the tarsal region of the limb had become more appreciable over the previous two weeks. On physical examination, the dog was hyperthermic (39.4°C), panting and had a heart rate of 140 beats/min. No abnormalities were noted on thoracic auscultation or abdominal palpation, and the owner reported no recent travel history or trauma. The dog was non-weight bearing lame on the right pelvic limb, and a pitting oedema at the tarsal region, which extended distally to involve the paw, was noted. Pain was elicited when the range of motion of the right tarsal joint was checked, and crepitus was noted within the joint. Bilateral inguinal lymphadenopathy was also observed. Results of a complete blood count test, serum biochemical analysis, and urinalysis were within reference limits. Survey radiographs of the right tarsal region as well as the thorax were obtained.

The lateral survey radiograph of the right tarsal joint (► Fig. 1) revealed severe osteolysis of the tarsal bones, with near complete destruction of the talus. Periosteal reaction was observed to involve the distal tibia all of the tarsal bones and the proximal metatarsal bones. Soft tissue swelling was also noted within the region. On the lateral thoracic survey radiograph, there was a rounded soft tissue density located dorsal to the first and second sternabrae that displaced the lung lobes dorsally (► Fig. 2A & 2B). No evidence of underlying bony erosion or pulmonary nodules was observed, and the soft tissue mass was suspected to be an enlarged sternal lymph node. Based on the physical examination and radiographic findings, the differen-



Fig. 1 Lateral survey radiographic view of the right tarsal region of a 4.5-year-old spayed female German Shepherd with a three-month-history of a progressive, non-weight bearing lameness of the right pelvic limb. Note the extensive osteolysis and periosteal reaction involving the distal tibia, tarsal bones, and proximal metatarsal bones (arrowheads). The lesion is focally aggressive, as is observed by the complete destruction of the talus.

tial diagnosis was primary bone tumour, metastatic bone tumour, synovial cell sarcoma, granulomatous disease, or septic arthritis.

What is your diagnosis?

Please see page 148 for the answer.

Dr. C. Todd Trostel, DVM
California Veterinary Specialists,
California, USA

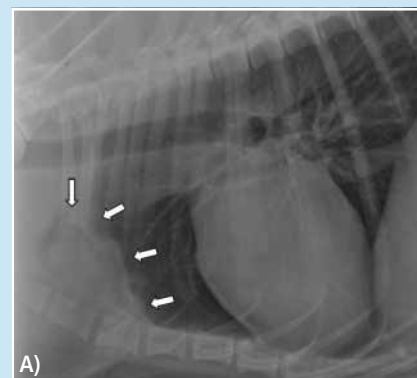


Fig. 2 Right lateral and ventrodorsal survey radiographic views of the thorax (A and B) of the same dog seen in Fig. 1. A large, soft tissue mass is identified (arrows) in the cranial aspect of the thoracic cavity. The mass is displacing the lungs dorsally. No evidence of bony erosion is observed involving the underlying sternabrae.

Vet Comp Orthop Traumatol 2010; 23: 93, 148
doi:10.3415/VCOT-09-08-0089
Received: August 21, 2009
Accepted: October 28, 2009