

consistent with a T3–L3 myelopathy. MRI and CT scans were performed.

RESULTS

Sagittal MRI sequences revealed a focal, well-demarcated, compressive extradural lesion that was hyperintense on T2-weighted and isointense on T1-weighted sequences, at the level of T11–12. There was heterogeneous contrast enhancement post-gadolinium administration. The main differentials were haemorrhage with origin in the ventral venous sinus or extradural mass.

Hemilaminectomy was performed and a large heterogeneous mass was removed. Histopathology revealed a hemangiosarcoma, which is typically an invasive, metastatic neoplasm in dogs. Full body

CT with contrast did not identify a primary hemangiosarcoma.

A single agent chemotherapy protocol with 5 cycles of doxorubicin at 30mg/m² was administered. Side-effects included diarrhoea and nausea, but the patient remained comfortable. Ambulatory recovery with residual ataxia was verified. Control MRI and x-rays confirmed remission 27 months postoperatively.

STATEMENT (CONCLUSIONS)

In the literature, only two cases of primary extradural hemangiosarcoma treatment and prognosis are described, with a survival time of 11 and 15 months. For this patient, a 27 month survival time was successfully achieved with surgery and doxorubicin.

Effect of a dog's age on stem cell culture times and efficacy outcomes in dogs with osteoarthritis treated with intra-articular injections of autologous mesenchymal stem cells

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OBJECTIVES

To evaluate whether a dog's age influences either the growth rate of autologous adipose-derived mesenchymal stem cells (adMSCs) during culture-expansion, or clinical efficacy outcomes following treatment with intra-articular (IA) adMSC injections.

METHODS

Dogs of various ages, each with a documented history of moderate-severe OA inadequately controlled on conventional therapy, underwent adipose tissue harvest for stem cell extraction and culture-expansion. Cell-cultures were photographed daily using the same optical field, cells counted and population doubling-time calculated.

Dogs were monitored for up to 6 months following IA adMSC injections into all affected joints. A Global Score, based on clinical examinations and owners' feedback on pain and mobility, was used to evaluate treatment response.

RESULTS

Fifty-two dogs were included in this analysis. No significant affect of dog's age was seen on population doubling time of low passage (P0 & P1) cultures of canine adMSCs.

The majority of dogs (98%) demonstrated a clinical improvement (51/52 cases) following adMSC injections, with 60% evaluated as demonstrating an excellent response (31/52 cases). In the oldest dogs (10–15 years) 94% showed a clinical improvement, with 6/18 (33%) demonstrating an excellent response. In younger dogs (<10 years) a greater number showed an excellent response (25/34; 74%).

STATEMENT (CONCLUSIONS)

Age of the donor does not adversely affect the ability of adMSCs to grow normally in culture.

Following intra-articular injections of adMSCs, 98% of dogs with moderate to severe OA showed a clinical improvement. Even in older dogs (10–15 years) 94% showed clinical improvements, with dogs <10 years most likely to demonstrate an excellent response.