

Synovial fluid glycosaminoglycan concentration in metacarpophalangeal joint of castrated horses and mares of different ages Contenido de glicosaminoglicanos del líquido sinovial de la articulación metacarpofalángica de caballos castrados y yeguas de difer

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Total concentration of synovial fluid glycosaminoglycan (GAGs) and a fraction of it (GAGsT) which correspond to different GAGs from hyaluronic acid or sulfated GAGs (GAGsS) that mainly consist of chondroitin sulfate and keratan sulfate, were measured. Samples of synovial fluid were taken from normal metacarpophalangeal joints of crossbred equines immediately after slaughter by aseptic needle aspiration. Post mortem joints examination showed that there was no gross evidence of osteoarthritis or other joint disease, based on the appearance of synovial membrane and articular cartilage. Synovial fluid samples were evaluated by its external appearance, protein concentration and mucin clot test. Samples were allotted in four age groups by teeth examination and divided in mares (m) and castrated horses (c.h.) as follows: 1.5 - 2 years (n = 23: 12 m. and 11 c.h.); 4 - 5 years (n = 15: 9 m. and 6 c.h.); 6 - 8 years (n = 23: 13 m. and 10 c.h.) and over 10 years old (n = 17: 12 m. and 5 c.h.). A c