Femoral head and neck excision

The (most) unkindest cut of all? a

Femoral head and neck excision has been in vogue as a salvage procedure for treatment of painful conditions of the coxo-femoral joint of dogs and cats for more than half a century. Although the frequency with which this procedure is performed is not well documented, anecdotal reports suggest that it is one of the more common surgical procedures performed in general practice for treatment of debilitating hip disease and injury. This may particularly be the case when total hip arthroplasty is not a feasible treatment option for any reason. While it would appear that owners are invariably satisfied with the results of this surgical procedure, gait analysis data showed that it resulted in functional deficits in both small and large breed dogs (1). It is clear that there is room for improvement in the outcome of this surgical procedure, but the paucity of research on this problem is stark; this deficiency is particularly apparent if one makes a comparison with the voluminous body of research on procedures such as stabilization of the cruciate ligament deficient stifle.

Since femoral head and neck excision is probably performed mostly in general veterinary practice, then surgeon inexperience could also be responsible for suboptimal outcome due to technical errors. At one time, the interposition of muscle between the osteotomized femur, and the acetabulum was a popular modification of the procedure, but conclusive objective evidence supporting an improvement in outcome is lacking. Also, the importance of removing all of the femoral neck in this procedure is a standard recommendation in every textbook description. A cadaveric study published in this issue of the Journal compared two methods of osteotomy (2). The authors found that use of a sagittal saw produced a smoother ostectomy surface in comparison to the use of an osteotome, which more often produced bone fissures and fragmentation (2). The findings of this study provide an impetus to further evaluate the outcome in clinical patients, using objective measures. Since it is unlikely that availability of total hip arthroplasty will ever eliminate the need for salvage procedures such as femoral head and neck excision, there is a need for more outcome-driven research to evaluate the influence of a range of factors on the success of the procedure, such as surgical technique, surgeon skill, patient factors, and postoperative rehabilitation.

References


http://dx.doi.org/10.3415/VCOT-15-08-0147