



Arthroscopy

Introduction

Keyhole surgery of joints (arthroscopy) is now a routine procedure in human medicine. The techniques and equipment have rapidly advanced over the last 25 years and arthroscopy has now also become commonly performed in horse practice.



The procedure

A small arthroscope (telescope) is inserted into the joint and a powerful source of light allows visualisation of the joint interior.

Instruments are then inserted into the joint. Instruments originally were limited to rongeurs to grasp and remove debris and fragments from the joint. However, with time small hand-held motorised equipment have evolved that have a variety of attachments (usually between 2 - 4.5 mm in diameter). The small attachments are capable of removing areas of damaged cartilage, membrane, and bone and can burr out bone cyst lesions. Most operations now rely on these motorised burrs.

The surgery is conducted, similar to in humans, where the surgeon uses a television monitor to visualise the instruments within the joint. Following the surgery the joint is usually flushed with several litres of sterile fluid. Arthroscopy is virtually always conducted with the horse under general anaesthesia. The whole procedure requires a team of an anaesthetist, surgeon and a trained nurse who all work to ensure that the operation works smoothly and quickly.

Advantages of arthroscopy

- The surgery is relatively non-traumatic and provides excellent cosmetic results
- There is a decreased convalescence time and an earlier return to work when compared to previous surgical treatments.
- The large size of horse joints make them ideal candidates for keyhole surgery
- It is preferred by vets due to the significantly reduced incidence of post operative infection and the reduced need to bandage the limb following the surgery





Kings Bounty Equine Practice Client Fact Sheet

Arthroscopy is the preferred treatment of choice for:

- Removal of chip fractures from joints, particularly knees, hocks and fetlocks (including some sesamoid fractures)
- Treatment of OCD: arthroscopy is the treatment of choice for many foals, yearlings or older horses with OCD, particularly when in the hock and stifles
- Treatment of infected joints: arthroscopy has the major benefit in the treatment of septic joints over traditional treatment because the surgeon can visualise all the introduced debris and infected material that can then be removed with rongeurs or the motorised equipment
- Treatment of bone cysts, particularly in the stifle joint
- Inspection of joints that are not responding to conventional treatment: arthroscopy allows a precise prognosis for many of these joints, when X-rays often do not give an accurate picture as to what is going on in the joint. It may also be possible to treat areas of damage with the motorised equipment
- Evaluation of the stifle joint: many equine stifle joint problems are related meniscal (cartilage) and ligament injuries. The extent of these injuries cannot be assessed on plain X-rays. This gives a more accurate prognosis for the animal's long-term soundness
- Treatment of tendon sheath problems: for example persistent windgalls or thoroughpin
- Recently keyhole surgery of the navicular bursa has been described and the technique can be used to assess horses with navicular disease or treat horses with infection within the bursa

