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Diagnostic hip arthroscopy in the dog

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Objective

To describe arthroscopic evaluation of the canine hip with the use of needle arthroscopy.

Animals

Dogs undergoing needle arthroscopy of the hip for diagnostic or therapeutic purposes.

Methods

The dog is sedated or anesthetized, placed in lateral recumbency with the affected hip joint up, and secured to the table. Traction of the limb is used as needed. A needle is inserted into the hip joint at the 12 o'clock position just dorsal to the greater trochanter. The length and size of the needle are dependent on the dog size. The joint is distended with lactated Ringer solution (LRS). If not directly accessed, the needle is redirected slightly until it drops into the joint. A small stab incision is created with a No. 11 blade through the skin and subcutaneous tissue. A straight hemostat is used to enlarge the superficial portal. The inflow sheath is placed with a blunt trocar or blunt probe or by using the spinal needle as a guide, followed by insertion of the arthroscope. Fluid egress is achieved by placing a needle in the 5 o'clock position for the right hip and the 7 o'clock position for the left hip. Potential instrument portals are established in the 10 o'clock position for the left hip and 2 o'clock position for the right hip. Intermittent infusion of LRS is achieved via a 60-mL syringe or pressured LRS.

Results

Needle arthroscopy enables direct visualization of hip structures to aid in the diagnosis and treatment of a variety of diseases affecting the hip.

Clinical Relevance

Direct visualization of the hip should be considered in patients with lameness and pain localized to the hip.

Keywords: needle arthroscopy, hip arthroscopy, hip joint, dog, diagnostics

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