

Biceps Tenosynovitis

Surgery Service



**Michigan Veterinary
Specialistssm**

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Locations

Auburn Hills

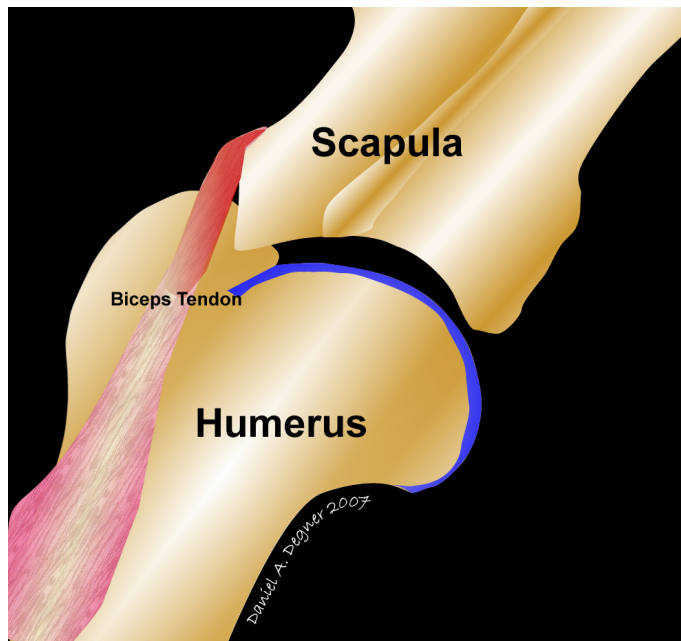
3412 E. Walton Blvd.
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Anatomy

The biceps tendon attaches onto the shoulder blade bone (scapula), passes through the shoulder joint and then through a groove in the top of the humerus bone (bicipital groove). The tendon widens into the belly of the biceps muscle and then attaches onto the radius and ulna bones of the forelimb. Contraction of the biceps muscle flexes the elbow and extends the shoulder joint.

What is Biceps tenosynovitis?

Biceps tenosynovitis is inflammation of the tendon of the biceps muscle (same muscle that we have in our upper arm) and its sheath. The causes of this problem are repeated injury to the biceps tendon, acute severe trauma, and chronic osteochondritis dissecans of the shoulder joint.

Signs and diagnosis

Most dogs that develop biceps tenosynovitis are mature, medium to large breeds; however, small breed dogs also can develop this condition. Intermittent or continuous lameness, which is exacerbated by exercise, is a common clinical sign of biceps tenosynovitis.

Your companion's veterinarian may find pain upon hyperflexion of the shoulder and extension of the elbow, as this stretches the inflamed biceps tendon. Direct palpation of the tendon near the shoulder joint also may elicit a painful response. Atrophy of the muscles of the affected forelimb is a nonspecific, but common finding.

X-rays of the shoulder may reveal calcium deposits of the biceps tendon and bone spurs that outline the sheath of the biceps tendon. Ultrasound of the biceps tendon may also reveal calcium deposits within the tendon and swelling of the sheath around the tendon. A sample of joint fluid from the shoulder typically will be compatible with degenerative arthritis. A definitive diagnosis of biceps tenosynovitis is made with arthroscopic examination of the tendon.

The day of surgery

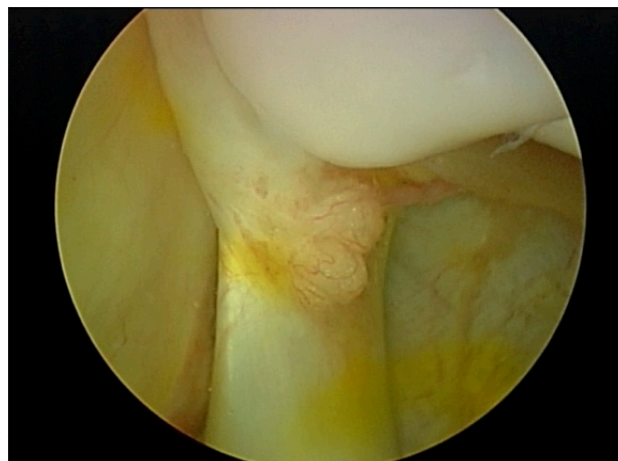
Our anesthesia and surgical team will prescribe a pain management program, both during and after surgery that will keep your companion comfortable. This will include a combination of general anesthesia, injectable analgesics, oral analgesics and anti-inflammatory medication.

Biceps Tenosynovitis Continued ...

Treatment

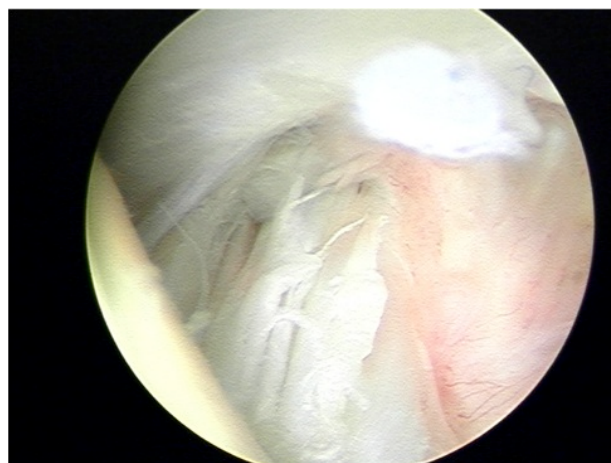
Medical therapy for biceps tenosynovitis includes exercise restriction, rehabilitation therapy, weight loss, and anti-inflammatory medications. An injection of cortisone can be administered into the joint and can be repeated three weeks after the initial injection. Failure of medical therapy to resolve the clinical signs warrants surgical treatment.

Surgery involves arthroscopic examination of the shoulder to confirm the diagnosis. Next, the tendon is cut from its attachment to the shoulder blade bone (see photo right above of normal tendon versus photo right below that shows a torn biceps tendon). The tendon will heal onto the top of the humerus bone with time, allowing the muscle to regain its function.



Aftercare and results

After surgery, you can continue to give your pet a prescribed pain reliever to minimize discomfort. It's also extremely important to limit your dog's activity and exercise level during the post-operative period. Rehabilitation exercises can be done at your home or if you choose, by professionally trained therapists at an animal rehabilitation center. Rehabilitation therapy should be continued until your dog is bearing weight well on the operated limb (typically 4 to 8 weeks after surgery). Detailed instructions will be given to you after the surgery. In addition to surgery, weight management and intermittent use of nonsteroidal anti-inflammatory medication may be needed.



The surgeon will monitor the healing process with two follow-up exams. The first is scheduled two weeks after the surgery and the second is at eight weeks after the surgery. By 2 weeks after surgery, most dogs are moderately weight-bearing on the operated limb, although exercise should be limited during the first two to three months after the procedure.

Medical management is successful in about 50% of the cases. Surgical treatment usually provides the patient relief of pain and resolution of lameness. Full recovery may take 4 to 6 months after the surgery.

Biceps Tenosynovitis Continued ...

Assessment and recommendations

Patient name: _____ Date: _____

Treatment

- Arthroscopic surgery is recommended by a surgeon at MVS
- Medical therapy is recommended at this time

The following has been prescribed

- No medications or special diet are necessary at this time
- Prescription joint diet: _____
- Nutraceutical: _____
- Nonsteroidal anti-inflammatory medication: _____
- Other medication(s): _____

Exercise:

- Unlimited
- Confine your pet to the house other than very short leash walks necessary for bowel movements and urination
- Restrict exercise to leash walks 10 minutes twice daily

Preparation for surgery

- Start fasting your companion at midnight before the surgery; water should not be withheld
- Pepcid AC 10 mg tablets: give _____ tablets with water (if needed use a syringe) at 6 AM on the day of surgery

*Composed by Daniel A. Degner, DVM, DACVS
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