Symptomatic distal biceps tendinopathy
Natural course, Treatment and Prognostic factors

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Backgrounds

Distal biceps tendinopathy
Proximal biceps tendinopathy is a well-recognized clinical entity in the shoulder. But, there is no published evidence regarding the natural history of distal biceps tendinopathy.

Current studies
- US-guided platelet-rich plasma injection
- Radial Extracorporeal Shock Wave Therapy

Purpose of study

We evaluated
- Treatment options of distal biceps tendinopathy
- Associated prognostic factors of distal biceps tendinopathy

Materials and methods

Materials
- June 2010 to August 2017
  - 21 cases with distal biceps tendinopathy ; in 20 patients
    With X-ray and MRI study, f/u more than 6mo
  - The mean age was 57.1 years (39 ~ 69 years)
  - 13 males and 7 females.

Evaluation

History and Symptom
- Pain on antecubital fossa
- Radiating into both the arm and forearm

Physical exam
- Point tenderness of radial tuberosity
  anterior in supination, posterior in pronation.
- Resisted supination of the forearm
- Localized pain on antecubital fossa

Treatment Options
- Splint and NSAIDs : Intermittent splint for 3weeks
- US guided Steroid/Lidocaine injection
  Ropivacaine 2mg/Triamcinolone 40mg/Normal saline 1ml
  Full pronation ; Radial tuberosity – dorsolaterally positioned
- Surgery ; Distal biceps tendon reattachment

Anterior approach & Suture anchor

Two incision approach & Pullout suture

According to the severity of the symptoms, splint immobilization, oral NSAIDs, and ultrasound - guided steroid injection were performed. Surgical treatment was performed if the patient did not respond to conservative treatment for 6 months or longer.

Results

There were 9 cases of partial rupture of the distal biceps tendon associated with distal biceps tendinopathy on imaging studies. All 5 cases that underwent surgery had distal biceps partial rupture.

MRI finding of Distal biceps tendinopathy

Period of symptom duration (months before specific treatment)

Treatment of Distal biceps tendinopathy

Satisfaction rating scale

Conclusions

Conservative treatment of distal biceps tendonitis may promise good results. However, in case of partial tear of the distal biceps tendon and refractory to conservative treatment, surgical treatment could be a treatment option.

Discussion

- No guidelines for the management of distal biceps tendinopathy
- Partial tears, Distal Biceps Tendon Endoscopy
- <50% : Non-operative management
  Surgical debridement of the surrounding synovitis.
- >50% : Division of the remaining tendon
  Surgical repair of the entire tendon as a single unit.
- Prolonged duration of symptoms (≥8 months)
  Irreversible degenerative process
  Little response, local cortisone.

References