**PALMAR ANNUAL LIGAMENT PROCEDURES**

**There are two Surgical Technique for treatment of the palmar annual ligament**

1. **The extra synovial technique described by Churchill**
2. **Hawkins and the arthroscopically assisted technique.**



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| **Extra synovial Approach by Churchill and Hawkins**1. **Position the horse in either lateral or dorsal recumbence.**
2. **Then apply an Esmarch’s bandage and tourniquet to the mid-metacarpus/metatarsus.**

**Note : necessary in most cases.** 1. **Administer Peri-operative antibacterial and anti-inflammatory medications eg, Metronidazole Flunixin melamine**
2. **Prepare the skin on the skin on the palmar/plantar aspect of the fetlock is for aseptic surgery. Eg shave and scrub thoroughly chlorohexidine**
3. **Make a 4-cm-long skin incision on the palmar/plantar midline from the proximal edge of the annular ligament to just proximal to the ergot.**
4. **Then separate the subcutaneous tissues to expose the transversely oriented fibers of the annular ligament. Note: Exposure can be enhanced by retracting superficial tissues with a Gelpi or Weitlaner retractor.**
5. **Then make A short incision into the annular ligament permit placement of a Kelly forcep deep to the ligament.**
6. **Then open the Kelly forcep is and transect the annular ligament continue proximally and distally**
7. **For a better exposure of the proximal and distal aspects of the ligament, Mayo scissors may be used to complete the transaction, or the skin incision may be extended as needed.**
8. **Then Verify that the entire annular ligament has been released by digital palpation.**
9. **Note that in horses with chronic inflammation of this region, soft tissue swelling may make the exposure of the annular ligament a little challenging.**
10. **If you are face with exposure challenges, extend the skin incision proximally and distally and then obtain good retraction of the superficial tissues.**
11. **Note the flexor tendon sheath is usually not invaded using this approach.**
12. **However, If the synovial space is opened, you should use parenteral antibiotics and continue using beyond the perioperative period.**
13. **Then close the Subcutaneous tissues and skin in separate layers, and apply sterile**
14. **Note that this is the preferred technique for transection of the annular ligament because it does not require use of specialized instruments and has little likelihood of penetrating the synovial space.**
 | **Hawkins and the arthroscopically assisted technique.****Arthroscopically Visualized Desmotomy of the Annular Ligament** 1. **Basically , evaluate using an Arthroscopic for chronic tenosynovitis of the digital sheath to identify previously unrecognized lesions of the DDFT or SDFT, also use it to retrieve foreign bodies, then debride, to see restrictive scar tissue.**
2. **The lavage the sheath in the case of sepsis.**
3. **Then to visualize the annular ligament incise using a slotted cannula and blade or a bistoury.**
4. **Then place the arthroscopy is into the digital sheath via the portal just distal to the fetlock joint**
5. **Then verify that the cutting instrument is superficial to the manica flexoria**
6. **While the slotted cannula and blade or bistoury are placed from the proximal aspect of the digital sheath when directed distally**
7. **Then close the skin were the arthroscope and instrument portals was made and apply sterile bandage.**
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