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| Palmar Annular Ligament Desmotomy |
| Relevant Anatomy  | The palmarannular ligament of the fetlock runs from the abaxialsurface of the proximal sesamoid bones and transverses the palmar aspect of the fetlock joint. With the inter sesamoidean ligament, it creates a canal through which the superficial and deep digital flexor tendons pass. |
| Instruments needed  | General surgery packBlunt-ended tenotomy knife |
| Indications | Treatment of constriction of or by the palmar or plantar annular ligament, tendinitis in the digital sheath, or post-traumatic adhesions of the digital sheath. |
| Anaesthesia and Preparation | A routine preparation for aseptic surgery is performed from the proximal metacarpus and extends distally, |
| Surgical Technique | There are many techniques: * The closed approach with scissors
* The closed approach with a tenotomy knife
* The tenoscopic guided approach.
* Open approach (dropped)

1. A 2-cm skin incision is made over the proximal outpouching of the digital flexor sheath, and, using Mayo scissors, a subcutaneous tunnel is created distad to the distal extremity of the annular ligament.
2. The Mayo scissors are then positioned so that one arm is in the subcutaneous tunnel and one within the sheath.
3. With appropriate care to avoid the palmar or plantar vessels and nerve, the annular ligament is incised.
4. The skin alone is closed using 2-0 synthetic nonabsorbable suture material.

Conversely, the digital sheath can be distended with saline, and a stab incision can be made through the skin and into the sheath. A blunt tenotomy knife can be inserted into the sheath and turned at a 90° angle to the annular ligament to facilitate transection. |
| Post-operative  | 1. A sterile dressing is placed over the incision, and a pressure bandage is applied.
2. Hand-walking is begun in 3 days and is maintained on an increasing plane to preclude the formation of adhesions.
3. The sutures are removed in 14 days, and bandaging is maintained for 3 weeks.
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| Considerations | With uneventful healing, the main criterion for returning the horse to work is the time necessary for healing of the tendinitis in the superficial flexor tendon. |
| Complications and Prognosis | Dehiscence of the incision and the development of synovial fistulation are rare complications of the open technique. Such patients are placed on antibiotics, and careful wound management and bandaging are performed. The use of the closed technique virtually obviates this complication.If extensive changes have not occurred in the superficial or deep flexor tendons, the prognosis is good, but the presence of adhesions or gross pathologic changes decreases the probability for success. |