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DEEP FLEXOR TENOTOMY PARTIALLY IN EQUINE TENDON RETRACTION

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Abstract

Deep flexor tenotomy in horses partially requires to correct carriage of the flexor tendon retraction as a consequence of improperly treated traumatic tenosynovitis (granulomatous tenosynovitis, scar tenosynovitis, sicca tenosynovitis etc). The clinical aspect highlights abnormal origin of the limb at rest with the support member in hostels, shortened stride and 1st grade lameness then 2n . The treatment is limited to orthopedic surgery protocol followed of a rest period. Recovery occurs in about 60 days, and then the animal fully recovered.

Key words*: flexor, tenotomy, equine tendon, retraction, traumatic, support member.*

INTRODUCTION

Even at the beginning of the third millennium, when the horse became mainly a pet or sports there are situations in which horses are used to work on uneven terrain (forestry). Due to the full exploitation of such work, the terrain, and in competitions, where animals are subjected to maximal effort, tendon retraction can occur.

Tendon retraction is encountered most frequently the forelegs. Tendon retraction entail an arching of the carpal joint, changing the angle of the articulation and also the support in the affected limb. Acquired lesion is accompanied by a slight lameness that deepens as the retraction becomes stronger.

MATERIALS AND METHODS

The cases presented in this paper are selected from spontaneous constituency casework veterinary Doftanei Valley, Prahova county and cases presented at the Faculty of Veterinary Medicine, Bucharest, so the selection was made regardless of age, race or sex. Were presented in the consultation 4 cases of horses used in forestry, which showed moderate lameness, shortening amplitude step on the affected limb, limb position at rest was in forceps and a case of equine breed Friesian, male, age 6 years with significant lameness support in retirement and shortening amplitude increase bone on the affected limb. The last case was tried same orthopedic treatment without results, and after a period of approximately 30 days was ordered major surgery applying the deep flexor partial tenotomy.

Figure 1. Affected region

CLINICAL ASPECTS

Thorough clinical examination was performed for each case, the animal was examined at rest and in motion. The method was used inclines and parking in the slope to see the degree of shortening of the tendon. Three of the cases presented missing Arcara, lameness is less noticeable, the joint angle was not changed yet. The animal remained sloping long time without lifting leg support. In these cases intervened by adjusting copy, lowering the heel height until the outer wall horn and allowed us to apply a horseshoe without fangs and high added in the form of a semicircle at the forefront of the hoof. This animal was forced both walk and rest in a position that was intended tendon elongation and Opening BULETA joint exaggerated.

Horseshoe was replaced every three weeks in total orthopedic shoeing was maintained for six months.

The case represented by a horse breed belonging Friesian community police used to patrol the parks and the capital and presented to FMVB consultation found exaggerated tendon shortening followed by lameness, significantly reducing the step amplitude (40-50%), low resistance to effort, sometimes denial movement. In this case a conservative treatment was attempted by adjusting the hoof and a horseshoe orthopedic wearing without corner and headed uplifting about 3.5 cm, thereby trying to reposition the joint, joint angle and tendon interdigital lengthening and physiological dimensions. After 28 days from the application of orthopedic horseshoe the animal presents much pronounced lameness, discomfort in walking and in rest almost no support in forceps. Also observed, is a slight difference with the congener.

Figure 2. Contention method

The operation was carried out in field conditions, using the method of anesthesia anesthetic doses of ketamine dissociative micro administered in low doses (1 mg / animal / minute) throughout the intervention; method patented by one of the authors of this paper. Content was performed by French method, the camera drone. He resorted to mechanical and chemical asepsis place of choice and practiced an incision on the side of the metacarpal region in deep flexor right. Synovial sheath was opened and revealed the deep flexor tendon over a length of 20 cm. After this resections were performed tendon-shaped "v" alternatively three front and two on the medial side, the distance from each other by about four inches.

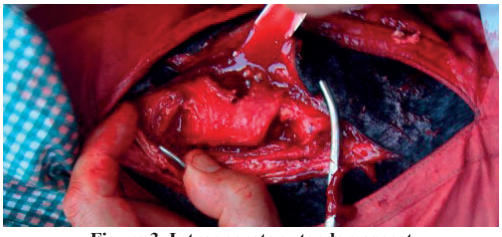

Figure 3. Intraoperatory tendon aspect

Excision of Tilt for each section approximately represented 30% of the thickness of both the lateral and medial side. After distancing, the regions was excised by suture points retraced separate synovial sheath, subcutaneous connective tissue with absorbable threads (PDS 2-0) and separate points skin with surgical silk. Post operator applied a bandage covering slightly compressive and animation was kept under observation in hospital faculty for 5 days, after which he was released. Immediately after waking animal orthopedic horseshoe was applied without fangs and high-headed, three inches.

RESULTS AND DISCUSSIONS

Tendon retraction gained is relatively common in horses undergoing major efforts in difficult conditions of trade vessels. It can occur as a symbol of trauma, the sicca tenosynovitis, the sheath great post sesamoid phalange or nodular tenosynovitis ago. Application of orthopedic treatment by adjusting the hoof and horseshoe application has proven highly effective in leading to three of the four cases in which tendon retraction was

in its infancy and had its origin in the operation of off-road.

The etiology traumatic event and presented the consultation in an advanced stage of the disease, orthopedic treatment applied, had no result. It was necessary surgery. Anesthesia was effective, providing surgical comfort sufficient to conduct security operation conditions, content provided both limb immobilization and easy access and convenient for the operator. Bleeding during surgery was reduced because large vessels were bypassed both pressure and the vein, thus addressing deep flexor at the side of its path enabled easily avoid vascular and nervous in the area. Applying bandage after surgery is necessary both to protect the incision line, and especially to stop bleeding and drainage of postoperative diffuse synovial secretion. The animal was kept under antibiotic for 7 days by administering the depot penicillin streptomycin mixed with a time of 24 hours at a dose of 1 ml mixture / 20kg bodyweight (Depomicin) seric therapy tetanus was applied immediately after surgery. The bandage was maintained for 10 days. Post operator adjustment is required hoof and horseshoe orthopedic application to force the tendon elongation and creating scars. November dimensions tendon surgery.

Figure 4. Recovery after 20 days

Postoperative convalescence expressed by total rest for 28 days and moderate progressive movement further 30 days, were recommended and applied to correct scarring after surgery. Orthopedic horseshoe was maintained for 60 days. After this period, the animal was saddled with a horseshoe-high front and without corner and has undergone a moderate and progressive training to complete restore normal topographic lines and angles.

The animal was fully recovered, as demonstrated by the fact that the intervention was made in July, and the animal was usedin the military parade on the occasion of Romania's National Day, on December 1st where he showed no defects on walking.

CONCLUSIONS

Remediation of tendon retraction in early stages by orthopedic methods leads to completely recover of animals after 6 months.

The rest of the tendon retraction animals treated by orthopedic horseshoe application is about 60 days.

Tenotomy is the only method of recovering the animal in cases of major tendon retraction.

Application of orthopedic horseshoe post tenotomy is required.

The animal recovery in the tendon surgery cases is at least 90 days, followed by recovery required by moderate and progressive effort.

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