## **Case Report**

# Incidence of Postpartum Prepubic Tendon Rupture and Abdominal Herniation in Fat-Tail Ewe

## Garoussi MT1\* and Ragh MJ<sup>2</sup>

<sup>1</sup>Department of Theriogenology, Faculty of Veterinary Medicine, University of Tehran, Iran. <sup>2</sup>Institute of Faculty of Veterinary Medicine, University of Tehran, Iran

\*Corresponding author: Garoussi MT, Department of Theriogenology, Faculty of Veterinary Medicine University of Tehran, PO-Box: 14155-6453, Tehran-Iran

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### Abstract

Occasionally herniation of abdominal wall may occur in ewe due to rupture of Prepubic tendon and muscles of abdominal walls during the last month of pregnancy. Subsequently, different parts of the gastrointestinal tract get out of their original location. Only one (0.2%) out of 500 ewes Shal fat-tail breed suffered from herniation due to the rupture of Prepubic tendon in Amin Abad research institution of Faculty of Veterinary Medicine, University of Tehran, Tehran-Iran. It was 7 years old. It was lambed normally for four times. The ewe delivered normally without any sign of dystocia in the last lambing. It was suffered due to Prepubic tendon rupture after 8 days of parturition. In abdominal exam, the signs of herniation were cleared typically. The herniation could be rejected in abdominal exam. This is the first report of rupture of Prepubic tendon and herniation of abdominal wall in ewe after parturition in Iran. It can be due to the weakness of abdominal wall muscles in aged ewes.

Keywords: Ewe, Fat-tail; Prepubic tendon; Postpartum

# **Case Presentation**

Rupture of Prepubic tendon occurring in the ventral abdominal wall may result in herniation of the gravid uterus and is occasionally seen in ewes and also in human [1,2]. The phenomenon may be observed following rough handling of the pregnant animal. The ability of the ewe with ventral abdominal herniation to strain during parturition is compromised and assistance is necessary for fetus survival. The present study reports the first incidence of Prepubic tendon rupture in a Shal fat-tail ewe after parturition in Tehran Province-Iran.

Five hundred ewe are kept in the farm research institution of Faculty of Veterinary Medicine, university of Tehran- Iran, Tehran-Iran. All of the ewe were fat tail Shall breed. They were housed in intensive system. In addition to, they were also fed in free pasture system in the research institute. They were typically fed alfalfa, straw and concentrate in various proportions using Totally Mixed Ration (TMR). All of the flock used natural insemination. Out of breeding season insemination management was performed in selected ewe. Nutrition and reproduction management were controlled using computerized flock health management. Sheep were vaccinated against brucellosis, foot and mouth disease and Clostridial diseases. Anthelmintics were used for parasitic infection.

Only one (0.2%) out of 500 ewes, suffered from herniation due to the rupture of Prepubic tendon (Figure 1). It was 7 years old. It was lambed for four times. The ewe delivered without any signs of dystocia in the last lambing. It was suffered due to prepubic tendon rupture after 8 days of parturition. Symptoms of rupture of propionic tendon were observed in the ewe (Figure 1). In abdominal exam, the signs of herniation were cleared typically. The herniation could be reversed in abdominal region [3]. Milk of the mammary glands was normal [4].



**Figure 1:** Postpartum abdominal herniation due to rupture of prepubic tendon in a Shall breed fat-tail ewe in Tehran-Iran.

Postpartum herniation of abdominal wall can be induced due to rupture of Prepubic tendon [5,6]. Normally, rupture of Prepubic tendon is seen during the last month of pregnancy in the ewe. However, it is shown that the herniation can be induced after lambing. It can be due to the weakness of abdominal wall muscles in aged ewes. The incidence of Prepubic tendon in ewe is very low.

## **Compliance with Ethical Standards**

## **Ethical approval**

All applicable international, national, and/or institutional guidelines for the care and use of cats were strictly followed.

### References

- Matsuda DK, Matsuda NA, Head R, Tivorsak T. Endoscopic Rectus Abdominis and Prepubic Aponeurosis Repairs for Treatment of Athletic Pubalgia. Arthroscopy Techniques. 2017; 6: e183-e188.
- Noaks DE, Parkinson TJ, England GCW. Veterinary reproduction and obstetrics. 10<sup>th</sup> edition. Saunders, Elsevier. UK. 2019; 245.
- 3. Mantziaras G, Vasileiou NG, Ioannidi KS, Mavrogianni VS, Gougoulis DA,

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Fthenakis GC, et al. Use of contrast-enhanced ultrasonographic examination to evaluate health status of mammary glands of ewes at the end of a lactation period. Journal of Dairy Research. 2018; 85: 39–43.

- Tsioli V, Fthenakis GC. Udder surgery in ewes. Small Ruminant Research. 2019; 181: 76–84.
- 5. Habel RE, Budras KD. Anatomy of the prepubic tendon in the horse, cow,

sheep, goat, and dog. American Journal of Veterinary Research. 1992; 53: 2183-2195.

 MacPhail CM. Surgery of the reproductive and genital systems. Editors. In: Fossum TW. Small Animal Surgery, 4<sup>th</sup> edition. Mosby, St Louis. 2013; 780–855.