The prepubic hernia due to rupture of prepubic tendon (prepubicdesmorrehexis) is seen most commonly during pregnancy in the mare (Mirza et al. 1997) and is rare in ruminants especially in sheep (Singh and Singh 1993). The rupture of prepubic tendon in ruminants is associated with increased weight of the gravid uterus, twins, hydrops of the fetal membranes, fetal giants and trauma (Purohit 2012). The symptoms include peculiar downward enlargement of the abdomen with the left side of the abdomen being more pendulous than the right and forward displacement of the mammary gland which causes hindrance to locomotion of the animal (Shaw et al. 2003). This affects the gait as animal walks cautiously and refuses to lie down (Singh and Singh 1993). Since rupture of the prepubic tendon is transverse, the gravid uterus drops downward into a sac formed by the skin and cutaneous muscles (Purohit 2012), rupture of prepubic tendon makes parturition more difficult than normal (Smeak 1998). Diagnosis of this condition is based on a clinical examination in conjunction with abdominal radiography and abdominal ultrasonography (Beittenmiller et al. 2009). The present paper describes the successful surgical management of acquired prepubic hernia due to prepubic tendon rupture in 6 sheep.

The present study was carried out on 6 adult ovines of both the sexes (4 pregnant ewes and 2 uncastrated rams) aged 2.5±0.89 years and weighing 29.5±1.8 kg, presented to Veterinary Clinical Services Complex of the Kashmir with the complaint of caudal abdominal swelling following trauma 6–10 days back in 4 sheep (2 ewes and 2 rams) whereas in other 2 ewes, swelling had appeared suddenly without any history of trauma (Fig. 1). The swelling on left side of the midline was more pendulous and large than on right side which was causing difficulty in the ambulation. All the animals were reluctant to lie down. The clinical evaluation included the digital palpation of abdomen and determination of heart rate, respiratory rate, rectal temperature (°F), ruminal motility, dehydration status observed by skin tent test at the neck and colour of conjunctival mucous membrane and capillary refill time. The data recorded, wherever applicable, was statistically analyzed using simple one way analysis of variance (ANOVA test). Significance was set at P<0.05. Based on the history, digital palpation of abdomen and clinical examination the diagnosis of prepubic hernia was made in all the cases. After considering the gravity of situation, emergency surgical intervention was planned in all the six sheep. Therefore, emergency surgical intervention was planned.

Surgical technique: In all the sheep, ceftriaxone @ 10mg/kg, intramuscularly (IM) and meloxicam @ 0.5mg/kg intravenously (IV) were administered 30 min prior to premedication. Sheep were administered with diazepam conjunctival mucous membrane and capillary refill time.

Fig. 1. A pregnant ewe showing prepubic hernia following trauma.

The prepubic hernia in ovines of Kashmir was successfully managed surgically in 6 sheep (Dar et al. 2016). The present study was aimed to describe the surgical management of acquired prepubic hernia in ovines of Kashmir.
hydrochloride slowly @ 0.5 mg/kg body weight intravenously and IV fluid line (5% DNS) @ 20 ml/kg over
the 30 min to maintain the arterial blood pressure. The animals were prepared for aseptic surgery after proper
shaving and thorough scrubbing of the ventral abdomen. The animals were anaesthetized by lumbosacral epidural
anaesthesia using 2% lignocaine hydrochloride @ 4.6 mg/
kg body weight. The animals were positioned in dorsal
carcumbency on the surgical table. Surgical repair was
undertaken through a ventral midline incision made from
the umbilicus to the pubis on the middle of the hernia and
extended through skin and subcutaneous tissues in all the
cases. In pregnant ewes through the same skin incision, the
uterus was exteriorised and 4 inch long incision was made
on uterus for removal of fetus. Three single live monster
foetuses, 2 male and 1 female were recovered from 3
pregnant ewes; whereas in fourth pregnant ewe, 2 dead
foetuses, 1 male and 1 female were removed. As none of
the animals had complete avulsion of tendons from prepubic
bone, therefore, ruptured tendons were apposed with
ruptured abdominal muscles by a non absorbable suture
material prolene-No. 2 size using horizontal mattress suture.
Excess skin of the sac was removed and then closed using
braided silk No.1 in a horizontal mattress pattern. The skin
sutures were removed on 12th post-operative day.

The mean±SD weight of the fetuses was 3.98±0.67 kg.
However, 3 monster fetuses, mean±SD weight was
5.10±0.37 kg. Excessive weight of foetal monsters along
with weight of accumulated foetal fluids, may lead to
rupture of the prepubic tendon in ewes prior to lambing.
Although of rare occurrence in ruminant obstetrics, rupture
of prepubic tendon have been reported in the cows and sheep
(Singh and Singh 1993). Ventral abdominal hernia in
animals due to rupture of the prepubic tendon can be
diagnosed thorough physical examination in conjunction
with abdominal radiography and abdominal ultra-
sonography (Beittenmiller et al. 2009). However, in present
study, the diagnosis of prepubic tendon rupture were made
on the basis of history, digital abdomen palpation and
clinical examination.

Pregnant animals with a prepubic tendon rupture require
caesarean section to save the life of foetuses as the delay in
surgery increases complications (Aleem et al. 2010). All
the animals recovered uneventfully and were normal up to
the last examination 3 months later.

Rupture of prepubic tendon is an emergency condition
caused mainly by trauma which requires prompt surgical
intervention to save the life of animal. Immediate caesarean
section is indicated in pregnant animals to prevent further
complications.

**SUMMARY**

The present paper describes the surgical management
of acquired prepubic hernia due to prepubic tendon rupture
in 6 ovines of both sexes (4 pregnant ewes and 2 rams)
aged 2.5±0.89 years and weighing 29.5 ± 1.8 kg. The sheep
were presented with the complaint of caudal abdominal
swelling and reluctance in lying down. The physiological
parameters were within normal range. The sheep were
operated under diazepam sedation and lumbosacral epidural
anaesthesia using 2% lignocaine hydrochloride. Surgical
repair was undertaken through a ventral midline incision
and simultaneously caesarean section was performed in
pregnant cases. All the animals recovered uneventfully.

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