

SURGICAL MANAGEMENT OF BILATERAL PERINEAL HERNIA WITH RECTAL PROLAPSE IN A MALE GERMAN SHEPHERD DOG

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A male German Shepherd dog aged 6 years 5 months weighing 24kg was presented with a history of protrusion of mass from the anal opening and a large swelling on either side of the anal opening, anorexia, not passing faeces and urine since 2 days. Dog was having a history of chronic constipation. Clinical examination revealed large swelling at both ischio-rectal fossa and rectal sac protruding out of the anus. Ultrasonography of the swelling revealed presence of anechoic content indicating urinary bladder. Blood report showed significant leucocytosis (56600cells/mm³) and increase in the creatinine levels (7.1mg/dl). Urine analysis showed Leucocytes +2 (125cells/μl), Blood +2 (80cells/μl), Protein +2(1g/l), Specific gravity 1.010 and Ph 6.5. Based on history, clinical signs, ultrasonography and laboratory examination the case was diagnosed as “bilateral perineal hernia with rectal prolapse”. Bilateral hernioraphy was performed and animal made uneventful recovery.

Keywords: Dog, Hernia, Prolapse.

Perineal hernia results from failure of the muscular pelvic diaphragm to support the rectal wall, which stretches and deviates. The exact cause of muscle weakness is unknown but some factors have been proposed, such as neurogenic or senile muscle atrophy, myopathies, prostate enlargement, hormonal alterations and chronic constipation. The swelling is usually ventrolateral to the anus (Bellenger and Canfield, 2003). Rectal diseases that may play a role in perineal herniation include rectal deviation (S-shaped curvature of the rectum), sacculation (dilatation of rectal wall), and diverticulum (mucosal protrusion

through seromuscular layer of rectal wall) (Mann, 1993). Present communication puts on record, successful management of a bilateral perineal hernia with rectal prolapse in a male German Shepherd dog.

Case History and Observation

A male German Shepherd dog aged 6 years 5 months weighing 24kg, was presented with a history of protrusion of mass from the anal opening and a large swelling on either side of the anal opening, anorexia, dyschezia and dysuria since 2 days. Dog was having a history of chronic constipation. Clinical examination revealed large swelling at both ischio-rectal fossa (Figure 1).



Figure 1: Bilateral perineal hernia with a rectal prolapse



Figure 2: Sonogram of the swelling showing anechoic content indicating urinary bladder

There was a rectal sac protruding out of the anus. Animal was dull and depressed, conjunctiva was slightly congested and rectal temperature was normal (101.4°F). Ultrasonography of the swelling revealed presence of anechoic content indicating urinary bladder (Figure 2). Urethra was catheterized to empty the urinary bladder and warm soap water enema was performed to empty the rectum. Blood report showed significant leucocytosis (56600cells/mm³) and increase in the creatinine levels (7.1mg/dl). Urine analysis showed Leucocytes +2 (125cells/μl), Blood +2 (80cells/μl), Protein +2(1g/l), Specific gravity 1.010 and Ph 6.5. Urine sample was sent for ABST and Culturing. Dog was stabilized with Inj RL 500ml IV and Inj DNS 300ml IV. Based on history, clinical signs, ultrasonography and laboratory examination the case was diagnosed as “bilateral perineal hernia with rectal prolapse”.

Treatment

Surgical site was prepared aseptically. Pre-operatively, Inj Ceftriaxone (Intacef, Intas Pharmaceuticals Ltd, Ahmedabad) @ 25mg/kg b.wt IV, Inj Meloxicam @ 0.2mg/kg b.wt SC, Inj Triflupromazine Hcl @ 1mg/kg b.wt IV and Inj Atropine Sulphate @ 0.04mg/kg b.wt SC were administered. Anaesthesia was induced and maintained using 2.5% Thiopentone Sodium. Animal was positioned in a lateral recumbency. Curvilinear incision was made lateral to the anus. Urinary bladder and pelvic fat was reduced to normal position and herniorrhaphy was performed by traditional technique. The external anal sphincter was sutured to the levatorani and coccygeus muscles laterally and to the internal obturator muscles ventrally by cross mattress suture pattern using Polyglycolic Acid No.1. Subcutaneous tissue was sutured by subcuticular suture pattern using Polyglycolic Acid No.0 and Skin was apposed by horizontal mattress suture pattern using Polyamide No.1. Same procedure was followed to correct the perineal hernia on the other side of the anus. Prolapsed portion of

the rectum was excised after applying series of horizontal sutures all around the anus including skin and rectal mucosa using Polyglycolic acid No.0. Edges of remaining portion of the rectum was apposed by simple continuous suture pattern using Polyglycolic acid No.0. Post-operatively, Inj Tremadol @ 2mg/kg b.wt. I/V was administered as an analgesic and dog was kept on Tab Cefpodoxime Proxetil (@ 10mg/kg b.wt.PO SID for 7 days and Tab Carprofen @ 4mg/kg b.wt.PO SID for 3days. Owner was advised to give liquid diet for 5days and one spoon of liquid paraffin daily.

On the 2nd post-operative day haematology and serum analysis was performed and it showed reduction in the TLC and serum creatinine levels (TLC = 15,750cells/mm³, Serum creatinine = 2.552mg/dl). ABST and Culturing of urine sample showed the growth of gram positive cocci (Staphylococci). The report was received 2 days after the surgery. It was sensitive to enrofloxacin and resistant to amikacin, ampicillin, cloxacillin, gentamycin, ceftriaxone, cefotaxime, chloramphenicol, amoxicillin sulbactam. Therefore dog was kept on Tab Enrofloxacin @ 5mg/kg b.wt. PO SID for 7days. Dog recovered completely without any complications.

Discussion

The pelvic diaphragm is composed of the levator ani muscle, coccygeus muscles, superficial gluteal muscle, internal obturator muscle, external anal sphincter muscle, and sacrotuberous ligament. The disease occurred commonly in males and was associated with constipation, obstipation, dyschesia, a soft perineal swelling and occasionally urinary problems. Perineal hernia might be associated with sacculation, dilatation, deviation and diverticulation of rectum, retroflexion of urinary bladder or urethral obstruction. In the present case bilateral perineal hernia was associated with rectal prolapse due to chronic constipation.

Conclusions

In the present case bilateral perineal hernia was surgically treated by using traditional technique and at the same time rectal prolapse was also corrected as per standard procedure. Animal was kept on InjTremadol@ 2mg/kg b.wt IV as an analgesic once in 8 hours for 2days to prevent tenesmus due to pain. Animal recovered completely without any complications.

References

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