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Surgical correction of urethral prolapse in a Pug

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An eight-month-old male pug, weighing 6 kg was presented with a history of protrusion of reddish mass from the tip of penis for the past three days. Clinical examination of the penis revealed urethral prolapse (Fig. 1). The physical and haematobiochemical parameters were within the normal range. Initially the condition was treated by applying icepacks over the prolapsed mass, along with systemic antibiotic and steroids therapy. Elizabethan collar was advised to prevent self licking and trauma to the prolapsed mass. Since there was no improvement in the condition with above treatment, surgical resection of the prolapsed mass was undertaken.

Under general anaesthesia a catheter was passed through the penile urethra, to avoid retracting of urethral mucosa within the urethral lumen after resection, and secured by using stay sutures placed at the junction of urethra and glans penis. The prolapsed mass was resected exactly perpendicular to the tip of penis. The mucosa of urethra was sutured to the penile mucosa by simple interrupted pattern using 5-0 PGA (Fig. 2). The urinary catheter was left *in situ* for 5 days. Postoperatively cefatoxime 20 mg/kg i.v. for 5 days and meloxicam 0.2 mg/kg i.v. for two days were administered. Postoperatively stranguria and haematuria were noticed for 7 days.

The relationship between brachycephalic breeds and urethral prolapse may be due to abnormal development of urethra or the increased intra-abdominal pressure, which may impair venous return and subsequently causing chronic engorgement of corpus spongiosum tissue surrounding the distal urethra (Hobson and Heller, 1971).

Urethral prolapse is often repaired by resection and anastomosis of the protruding tissue. Kirsch *et al.* (2002) described new urethropexy technique, by putting 2 to 4 evenly placed sutures into the



Figs.: (1) Urethral prolapse; (2) After surgical resection.

urethral lumen, the distal penile urethra being inverted to reduce the prolapse. The procedure had a good prognosis with no recurrence in three treated cases. Yi Lin *et al.* (2007) reported failure of urethropexy technique in two dogs with urethral prolapse and the recurred urethral prolapse was treated successfully with the conventional technique, wherein the urethra was sutured to tunic of the penis. Stranguria, dysuria, pollakiuria, haematuria, swelling at the site and haemorrhage from the anastomotic site may continue for up to 10 days after urethral prolapse resection. Prognosis for surgical cure is usually good if self- trauma and excitement are avoided (Yi Lin *et al.*, 2007).

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