

SURGICAL CORRECTION OF CLEFT PALATE IN A KITTEN

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[Received: 02.1.2018; Accepted: 07.8.2018]

A four months old male kitten was presented to Star Pet Hospital, Mylapore, Chennai with the history of oozing of food particles from nostril after feeding for a week. On clinical examination of oral cavity revealed a cleft palate. Under general anaesthesia, sliding bipedicle flap repair was performed to correct the cleft palate defect. The kitten had an uneventful recovery.

Keywords: Bipedicle flap, Cat, Cleft palate.

Cleft palate is a congenital or acquired communication between the oral and nasal cavities which contaminate the nasal cavity with saliva or food (Sousa Filho *et al.*, 2016). The palate separates the oral and nasal cavities. Congenital defects of the hard and soft palate may be due to an inherited trait with an incomplete penetrance. Acquired cleft palate is caused either through trauma such as a fall from high elevation, foreign body penetration, hit by car or electrical cord injury (Maretta *et al.*, 1991). Cleft palate interferes with suckling and allows fluid to enter the

nasal cavity and leads to death by choking or aspiration pneumonia. Prognosis without surgical correction is grave.

A four months old male kitten was presented with the history of oozing of food particles from nostrils after feeding. On clinical examination of the oral cavity revealed a cleft palate defect (Figure-1). Plain thoracic radiography was normal. Preoperative haematology and serum biochemistry values were within the normal range.



Figure-1. Cleft palate before surgery

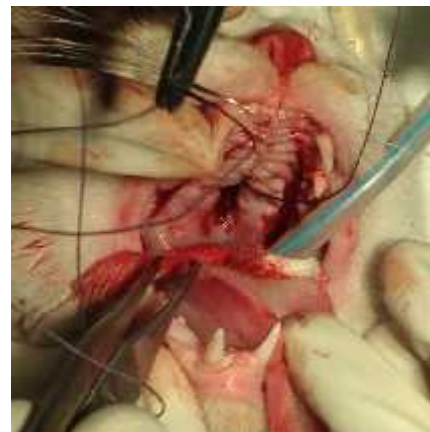


Figure-2. Apposing the slided bipedicle mucoperiosteal flap over the defect

The kitten was pre-medicated with butorphanol @ 0.1 mg/kg body weight (I/V), diazepam @ 0.25 mg/kg body weight (I/V) and induced with propofol @ 3 mg/kg body weight (I/V) and maintained with isoflurane 3%. Ceftriaxone @ 10 mg/kg body weight (I/V) was given. On dorsal recumbency, with wide open mouth position margins of the cleft

palate defect were incised. Bilateral releasing incisions double the length of the defect were made along the margins of the dental arcade. Partial thickness mucoperiosteal layer on both sides of the defect was elevated. Mucoperiosteal flaps were slid over the defect and apposed with simple continuous pattern with buried knots using PGA 2-0

(Figure-2). Post operatively, the kitten was maintained with intravenous fluids DNS, RL and hestarch for 3 days. Injection ceftriaxone @ 10 mg/kg b.wt., pantaprazole @ 1 mg/kg b.wt. and butorphanol @ 0.1 mg/kg b.wt. were given intravenously for 3 days. On 4th

day, the kitten was fed with liquid diet. Soft diets were given for the 2 weeks follow up. Postoperative evaluation was done after 2 weeks revealed healing without complications (Figure 3). The kitten had an uneventful recovery.



Figure 3. Post-operative evaluation at 2nd week

In the present case study, cleft palate was successfully corrected using bilateral mucoperiosteal flap.

References

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technique for repair of caudal hard palate defects. *J. Vet. Dentistry*, 8(1): 5.

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