CASE REPORT

Clinical Diagnosis and Management of a Congenital Bilateral Wattle Cyst in a Kid

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Wattle cysts or tassel cysts are superficial swellings in goats, which normally appear apparently harmless to the quality of life of the species. A case of congenital bilateral wattle cyst in a kid with its clinical differential diagnosis, therapeutic management and clinical significance has been put on record in this communication.

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Case History and Clinical Observations

A two-month-old female Barbari kid was presented to the surgery outpatient unit of the Teaching Veterinary Clinical Complex of the College, Mannuthy (Kerala) with the history of having a small gradually enlarging mass, each next to wattles since birth. The kid was delivered normally and was the lone birth in her second kidding. The owner had also reported normal suckling behaviour, appetite and voiding. The kid and dam had been dewormed two weeks prior to presentation. The farmer was concerned since he had noticed gradual increase in size of the bilateral masses though it did not affect the normal behaviour and apparent health of the kid.

The kid was found to be alert, active and responsive on clinical presentation. All vital parameters were within the normal limits and it was normal in general appearance with steady, coordinated gait and normal stance. She had normal range of motion of head and neck and did not elicit any discomfort in regular movements. Swallowing reflex was also observed to be normal.

On physical examination, bilateral, almost identical masses were found at the base of both wattles. These were sessile, non-ulcerative ovoid, smooth but fluctuant, neither warm nor cold to touch, or discoloured in appearance though had few hairs and maintained continuity of coat colouration. The mass on left had a diameter of 3.2 cm and on right was 3.0 cm (Fig.1 and 2). No pain response was elicited from the animal on palpation of the masses. The mass on the left was assessed to be firm at the base and exerting considerable pressure against the pharynx though the kid did not elicit any discomfort in swallowing or feeding currently.

Treatment and Discussion

The hair over the mass was shaved off and the skin was scrubbed with povidone iodine (10% solution, Betadine®). Upon aspiration with a sterile 20-gauge hypodermic needle and a 12 mL syringe, 4.0 mL of clear colourless odourless fluid was drawn out. Upon cytological examination following a Field's staining under a compound microscope, it revealed colourless fluid and few neutrophils (Fig. 3). No evidence of parasites, parasitic eggs, protoscolices or any bacterial cells were found. Thus, it was confirmed a wattle cyst.

Upon local infiltration analgesia with 2% lignocaine hydrochloride, distal end of the mass was lanced and the fluid was drained out completely. The cavity was irrigated with tincture iodine solution and a Seton was placed. A single dose of tetanus toxoid (≥ 5 Lf) was administered intramuscular and wound care was continued for the next six days. The kid made a smooth recovery over the following week. No recurrence of the same was observed on follow-up after two months.

A wattle cyst is also known as a tassel cyst. A wattle cyst is a rarely documented (Ratnu *et al.,* 2016) superficial swelling found more commonly in goats rather than in sheep (Sadan, 2019). These have been reported to be congenital (Syam *et al*., 1999; Anoop *et al*., 2010; Farghali *et al*., 2020), bilateral (Badawy, 2011; Ratnu *et al.,* 2016) and positive in response to minor surgical interventions (Abu-Seida, 2014; Ratnu *et al.,* 2016). They were found to be very small at birth in the kid though they usually enlarge with time and become more noticeable at a later age (Sadan, 2019). Wattle cysts are the result of a failure of the branchial clefts to fuse during embryonic development (Farghali *et al.,* 2020). It is also

documented as being caused by a dominant autosomal gene in regard to variations in shape and location on wattle (Ratnu *et al.,* 2016). Dermal inclusion cysts could sometimes be mistaken for wattle cysts (Matthews, 2016). The observation of the clinical signs, elicitation of history, localisation of lesions and examination of fluid aspirated provided an easy field aid for the confirmative diagnosis of wattle cyst (Abu-Seida, 2014), which has to be differentiated from abscess, tumours, parasitic cysts, hematomas, diverticula or hernia (Sadan, 2019).

Fig. 1: Left wattle cyst on presentation

Fig 2: Right wattle cyst post-aspiration of cystic fluid

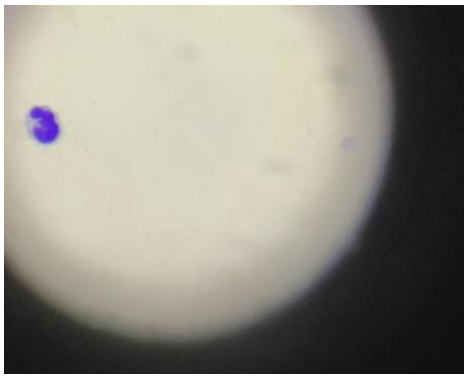

Fig. 3: Neutrophil in aspirate

Though aspiration had been opined to be risky owing to chances of abscessation (Jana and Ghosh, 2011; Farghali *et al.,* 2020), all aseptic precautions were taken in this case and no abscessation or complication was observed in concurrence with a similar line of treatment employed by Ratnu *et al.* (2016).

The present case report highlighted the significance of the timely diagnosis and aseptic surgical intervention to curb the cyst from exerting pressure against the pharynx, larynx and oesophagus. An extraluminal or percutaneous mass or persistent pressure could impede normal deglutition, feeding and even respiration and/or bleating/vocalisation. Hence, the treatment was not just aimed at preserving cosmesis but averting a potential functional crisis. Proper differential diagnosis is essential at field level to diagnose such conditions in goats which are usually ignored by farmers and hold the potential to cause functional deficits later. There are very few case reports of this rare congenital bilateral condition in goats.

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References

Abu-Seida, A.M. (2014). Radiographical examination and treatment of wattle cyst in goats and sheep. *Global Veterinaria, 12*(6), 862-864.

Anoop, S., John Martin, K.D., Syam K. Venugopal, Sarada Amma, & Unnikrishnan, K. (2010). Thoracomelia and its surgical correction in calf. *Indian Journal of Veterinary Surgery, 31*(1), 78.

Badawy, A.M. (2011). Some congenital malformations in ruminants and equines with special reference to the surgical treatment of recto-vaginal and cysto-rectal fistula. *Behna Veterinary Medical Journal, 1,* 14-27.

Farghali, H.A.M., Khatem, K.K.A., & Shamaa, A.A. (2020). Review on the common surgical affections in sheep and goats. *Journal of Applied Veterinary Science, 5*(3), 40-48.

Jana, D., & Ghosh, M. (2011). Congenitalwattle-based cyst in a Sirohi kid and its successful surgical management. *Intas Polivet, 12*(1), 69-70.

Matthews, J. (2016). *Diseases of the Goat*. 4th edn. John Wiley & Sons Limited, New Jersey, USA, 411 p.

Ratnu, D.A., Parmar, J.J., Dabhi, P. B., Tank, J.K., Gondaliya, R.B., & Parikh, P.V. (2016). Ultrasonographic diagnosis and surgical management of wattle cyst in kids. *Ruminant Science, 5*(2), 307.

Sadan, M. (2019). Superficial swellings in sheep (*Ovis aries*) and goats (*Capra hircus*): Clinical and ultrasonographic findings. *Journal of Veterinary Medical Science, 81*(9), 1326-1333.

Syam, K. Venugopal, Balagopalan, T.P., Saradamma, T., Ravindran Nayar, S., & Muraleedharan Nayar, K.N. (1999). Atresia ani along with recto-urethral fistula in a perosomus caudatus calf. *Indian Journal of Veterinary Surgery, 20*(1), 60.