SURGICAL MANAGEMENT OF LARGE CHRONIC INTEGUMENTARY ABSCESSES IN FIVE MURRAH BUFFALOES

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SUMMARY

Five Murrah buffaloes were presented with the history of large hanging integumentary masses at different regions of the body since few months. Based on physical examination, ultrasonography and needle aspiration, the masses were diagnosed to be chronic abscesses. Successful total surgical excision of the masses was done in all the five buffaloes under sedation and local anaesthesia.

Keywords: Buffalo, Chronic abscess, Excision, Pus

Abscess is a localized suppurative inflammation limited by a wall of granulation tissue (Sastry and Rama, 2004). An abscess may develop in any part of the body in response to injury, foreign body penetration, use of contaminated needles for injection and poor managemental practices. A chronic abscess is slow to develop, shows little or no inflammatory reaction and may be painless or slightly painful (Wakankar and Moulvi, 2015). Total extirpation is possible if the abscess is accessible with a well-developed capsule and have no surrounding cellulitis (Flower, 1998). The present article reports the total surgical extirpation of chronic integumentary abscesses at different locations in five Murrah buffaloes.

Five Murrah buffaloes of different age and parturition status were brought to University Veterinary Hospital with the complaint of a gradually increasing mass at different locations on the body (Fig.1). On physical examination, the mass was semi-solid to solid in consistency and no pain was evidenced by the animal on palpation. All the buffaloes were subjected to ultrasonographic examination of the masses (Fig.2) which revealed presence of uniform echogenic material with a hyperechoic capsule surrounding it. Needle aspiration of the echogenic material revealed thick inspissated pus. Thus, based on the history, clinical and ultrasonographic examination, a diagnosis of chronic abscess was made in all the buffaloes. Surgical excision of the masses under sedation and local anaesthesia was advised to the owner.

The buffaloes were sedated using Inj. Xylazine Hydrochloride @ 0.03mg per kg b.wt. intravenous and were restrained in lateral recumbency with the affected side placed upwards. Then 2% lignocaine hydrochloride was infiltrated along the site of incision as a local anaesthesia. The surgical site was aseptically prepared. An elliptical skin incision was made at the base of the abscess

and the entire abscesses were surgical excised out without damaging the capsule (Fig.3). The bleeding vessels were ligated and the muscles, subcutaneous tissue and the skin were closed in routine manner.

Postoperative care included antibiotics (inj. Streptopenicillin 5gm daily for 5 days and analgesic inj. Meloxicam @ 0.2mg/kg, intramuscular, once daily for 3 days. Daily wound dressing was advised with povidone iodine and fly repellent spray. Removal of skin sutures was advised on 14th post-operative day. Telephonic follow up at a period of 2 months did not report any complication or recurrence in any of the buffalo.

An abscess is a circumscribed inflammatory lesion which consists of a purulent exudate (pus) surrounded by a limiting membrane, the pyogenic membrane (Wakankar and Moulvi, 2015). In all the five buffaloes, the swellings were circular in outline and had well defined borders. The differential diagnoses include cyst, tumour, hernia and haematoma. Based on the physical examination, ultrasonography and needle aspiration, the condition was diagnosed to be chronic abscesses. A chronic abscess may be hard surrounded by fibrous tissue and containing small amount of pus or it may be soft and thin walled with comparatively larger amount of pus (Wakankar and Moulvi, 2015). Surgical incision and drainage may not be an effective method for treatment of chronic abscess because of the consistency of the contents and the large dead space present which can result in reinfection. Moreover, total resection of such large abscesses without damaging the capsule part lead to early healing as the skin sutures can be removed in 12-14 days. Otherwise, healing by drainage and daily dressing will take more to heal (Dwivedi et al., 2014). In all the five cases because of the location and size of the abscesses, surgical excision was possible. All the excised masses had well-defined thick capsule and contained semi-solid to solid pus.

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Fig. 2. Ultrasonogram showing echogenic contents Fig. 3. Photograph shwoing surgically excised masses (a) and presence of thick inspissated pus (b) inside. chronic abscess.

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