

# Surgical Management of Hard Fibroma in A Cross Bred Cow

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**Abstract**— An 4 year old crossbred cow was presented with a history of hard swelling at foreleg region. It was diagnosed as a fibroma and was excised surgically. Post operatively, antibiotics and anti inflammatory drugs were kept for 5 days. Good recovery was observed without any recurrence for a period of 8 months.

**Keywords**— crossbred cow; fibroma.

## I. INTRODUCTION

**F**ibromas are benign neoplasms of with abundant collagenous stroma. The occurrence of fibroma involving skin is very rare in cattle as compared to papilloma (Theilen and Madewell, 1979). Fibromas and Fibrosarcomas are uncommon neoplasms in large animals under the age group of 1.5 to 2.5 years. The case report details the clinical presentation of a Hard Fibroma in a cross breed cow. These tumors are of mesenchymal origin and account for more than 20 % skin tumors in cattle (Tyagi and Singh, 1995). Depending on the amount of collagen fibres, fibromas can be categorized as soft fibromas and hard fibromas. The present paper reports a case of cutaneous hard fibroma at the fore leg region in cross bred cow and its surgical management.

## II. CASE HISTORY AND OBSERVATION

An 4year old crossbred cow was presented to Department of Teaching Vety Clinical complex, C.V.Sc, Tirupati, with history of hard swelling measuring about 15cm in diameter, at the fore leg region since two months (fig. 1). Clinically the growth was elliptical, hard and firm, without pain. It was diagnosed as a case of tumor involving the subcutaneous tissue and it was decided to perform surgery.

## III. TREATMENT AND DISCUSSION

The animal was sedated with xylazine hydrochloride @ 0.01 mg/kg body weight intramuscularly. The animal was restrained on lateral recumbency, and 2% lignocaine hydrochloride was infiltrated all around the site of operation. An elliptical incision was made around the tumor and by blunt dissection the skin was released. The blood vessels were ligated using chromic catgut No 1. Then, the growth was carefully dissected out (fig. 2). The bleeding vessels were cauterized with electrocautery. A series of subcutaneous sutures were applied and the skin was closed with interrupted sutures by using silk. Post-operatively, Intamox 3.5gms and Melonex 10ml were given intra-muscularly for a period of 5 days. The wound was dressed daily with povidone iodine solution, and the sutures were removed on the 10th post operative day. No reoccurrence was observed in a period of 8 months. The mass was subjected to histopathology.

Histopathological examination showed interlacing bundles of Fibroblasts with collagen fibers (fig. 3). Tumor cells with fusiform nucleus and multiple nucleoli were observed. Based on these the tumor was diagnosed as fibroma. The places of election of fibromas are the skin and sub cutaneous tissue, especially at dewlap and at the end of the tail in cows. In this situation they form hard nodular swellings or nodes covered by epidermis (Theodor Kitt, 2009). Yeruham and Peri (2001) also reported an unusual case of fibroma at the end of the tail in a 7 year old cross bred cow.

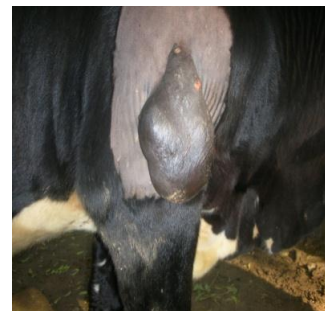


Fig. 1. Tumor at right shoulder.



Fig. 2. Excised tumor.

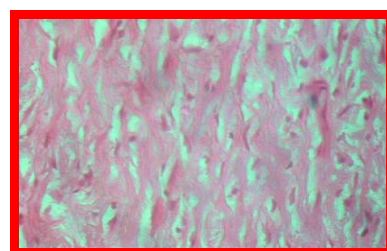


Fig. 3. Muscle bundles with fibroblasts.

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