

Short Communication

PROUD FLESH MANAGEMENT IN HORSE : A CASE REPORT

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ABSTRACT: Proud flesh is composed of excessive granulation tissue in an exuberant manner. A grey female horse aged about 4 yrs was presented with chronic wound along with proud flesh at buttock region. Initial treatment was refractory. The proud flesh was trimmed surgically and Topically Haemocoagulase solution and tincture Iodine solution was applied. Post operatively parenteral antibiotic, anti-inflammatory and oral Serratopeptidase are administered. Alternative day wound dressing was followed with lukewarm normal saline, Liquor Acriflavin (0.01%) and TCDO (Tetrachlorodecaoxide) and wound bandage was done with boric ointment impregnated gauge and cloth bandage. Cicatrix formation was completed by 42nd day.

Key Words: Proud Flesh, Horse, Surgical trimming.

Proud flesh is composed of excessive granulation tissue in an exuberant manner with dark red fleshy appearance, discharging sanguineous fluid and often protrude out from the wound and prevent further wound healing. Horses are predisposed to trauma wounds that can be labour intensive and expensive to manage. Complications of such infection of wound infection, formation of exuberant granulation tissue (EGT) and hypertrophic scarring are frequent in horse. Disregulation of fibroblast growth, decreased rates of contraction, microvascular occlusion, disregulated apoptotic process by hypoxia,

changes in the expression of the TGF- β 1, inefficient inflammatory response to trauma, disparity between the synthesis and degradation of collagen, down-regulation of specific gene expression and lower oxygen saturation values of the equine limb compared to the body may be involved (Carnevali *et al.* 2014)

History and Clinical findings

A grey female horse aged about 4yrs presented with chronic wound along with proud flesh at buttock region (Fig.1). History revealed presence of a second degree contusion injury which later ruptured. Initially, the wound was

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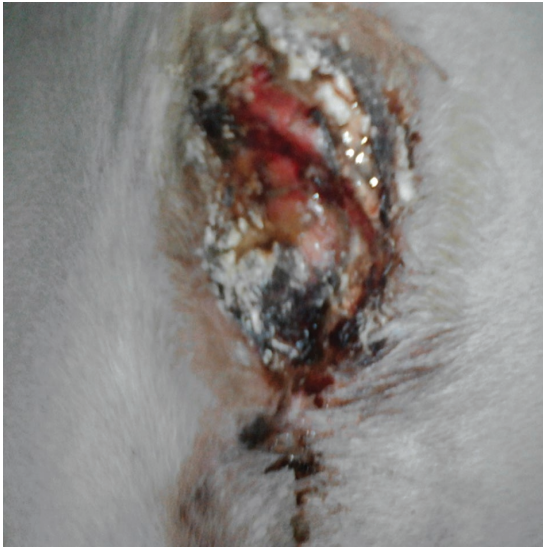


Fig. 1. Appearance of proud flesh.



Fig. 2. Condition of wound after surgical trimming.



Fig. 3. Healing of wound.

tried to heal by second intention healing. The horse was treated systemically with Inj. Streptopenicillin and Inj. Flunixin Meglumine. Topically Silver Sulfadiazine-Chlorhexidine cream was applied after cleaning the area with lukewarm saline solution. But, instead of healing proud flesh was observed.

Management and Discussion

The animal was administered Inj Tetanus toxoid @ 1 ml I/M prior to excision. Then the proud flesh was trimmed surgically *i.e.*, debulking was followed under aseptic principle (Fig. 2). Topically Haemocoagulase solution (Blotroclot solution, Juggat Pharma) and tincture Iodine solution was applied. Post-operatively, inj. Ceftriaxone-Tazobactum 3.375 gm (Inj IntacefTazo, Intas Animal Health), inj. Flunixin Meglumine (Inj Flunimeg, Zydus Animal Health) @ 1.1 mg/kg were given intravenously for 10 days and Bol. Serratiopeptidase (Bol Inflawin Forte 50mg, Excellar), PO, BD for 10 days.

The portions of proud flesh that is above the adjoining skin level is carefully cut away which allow the new skin to advance over the bed of granulation tissue. The proud flesh excised surgically to remove excess non-viable granulation tissue to reduce inflammatory

response which allows the wound to fill in with normal granulation tissue which is pink in color and cover with normal healing skin. Surgical excision was done without anaesthesia as granulation tissue is devoid of any nerve supply so it is a painless procedure. Flunixin is an effective anti-inflammatory drug to control inflammation in equine. Serratiopeptidase eliminate inflammatory swelling, accelerates liquefaction of pus and enhances the action of antibiotics (McGrath and Gary 2005).

For dressing, first the wound was cleaned with lukewarm normal saline, after drying, Liquor Acriflavin (0.01%) & TCDO (Tetrachlorodecaoxide) are painted successively. Then Boric ointment impregnated gauze was covered on the wound and cloth bandage was applied by wrapping. The wound was dressed on every alternative day. On second post-operative day pus was visible in the wound. On 3rd day granulation tissue appeared in the wound and it almost covered the wound by 21st post-operative day. Epithelial proliferation was initiated by 21st day and almost completed by 35th day. Cicatrix was completed by 42nd day (Fig. 3).

Lukewarm normal saline improved circulation. Liquor Acriflavin (0.001%) is one type of acridine compound which acted as antiseptic and was active against gram positive bacteria (Moore and Payne 2004). A gauze impregnated with Boric ointment made with vaseline was placed next to raw surface for easy removal of dressing without damaging the granulation tissue which also acted as caustic

agent. It was then secured with a cloth bandage around the buttock by wrapping for immobilization of the wound, which also protected the wound from flies and other contaminants. This Procedure of bandaging was important method for controlling excessive granulation tissue (Hettlich and Burba 2014).

TCDO acted as wound healing promoter by increased the wound cleaning activity and promoted favorable granulation and epithelization process with an increased local tissue oxygen level (Venkataram 2012).

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