



Beni-Suef University
Faculty of Veterinary Medicine
Surgery, Anesthesiology, and Radiology Department

AFFECTIONS OF THE WITHERS AND BACK

The withers and back are frequently the seats of injury caused by the saddle or other causes. Nature of the lesion varies according to the depth of the injury and degree of infection.

1-EXCORIATION OF THE SKIN: -

It is common in young horses when first put to work.

***Etiology**

The epidermis becomes softened by the sweat and is rubbed off by the movement of the saddle exposing Malpighian layer, which appears bright red in color. Serous discharge comes out from the wound and later on dried and forms scab on the denuded surface, and the denuded surface is highly painful.

***Treatment**

Removal of the cause (removal of the saddle) and application of astringent lotion and antiseptic ointment.

2-GALL: -

It is an edematous condition of the skin and or subcutaneous tissue as a result of infiltration of the tissue by serum and inflammatory exudates.

***Etiology**

It occurs as a result of sticking of the moist skin to the saddle; later on the skin is dragged by the moving saddle with laceration of the connective tissue. The condition is characterized by presence of one or more circular swellings of various sizes and can be recognized by passing the hand over the seat of the saddle. These swellings are sensitive and pit on pressure. When the saddle-bed is wet, these swellings dry first.

***Treatment**



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These cases can be treated by removal of the cause, cold applications and astringent lotions can treat the early stages, but later on, hot fomentation and massage are indicated.

3-HEMATOMA: -

***Etiology**

It is caused by direct pressure of the saddle on a particular part either as a result of unequal distribution of the weight of the rider or as a result of uneven padding of the saddle. The swelling is formed rapidly and it is hot, soft, fluctuating, but later on it becomes firmer and crepitates as a result of coagulation of the blood therein. Exploratory puncture will confirm the diagnosis.

***Treatment**

The same measures used for treatment of gall can be used for treatment of hematoma, but large cases require surgical incision, evacuation, and application of drain with Tr. Iodine.

4-SIT-FAST: -

It is an area of dry gangrene.

***Etiology**

It ensues as a result of arresting of blood supply of certain area of the skin by means of the saddle. Depth of the lesion varies, it may involve the skin only or it may extend into the subcutaneous tissue. The outer surface is greater than the inner surface as it assumes a cone shape. This area is sloughed later with formation of clear line of demarcation at the periphery.

***Treatment**

The condition can be treated by application of counter irritants like iodine ointment to hasten separation of the gangrenous tissue, and when the line of demarcation appears, the dead part should be cut away.



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5-HYGROMA OR BURSAL ENLARGMENT: -

It is an over distention of bursa on the top of the anterior dorsal spines and accumulation of serum in the connective tissue in the space beneath the trapezius or rhomboideus. The condition similar to abscess formation and can be distinguished from abscess by exploratory puncturing.

***Treatment**

Hygroma is treated on the general principles of this affection. It must be differentiated from abscess. Anti-phlogistics should be applied, and when it fails to resolve the problem, incision is indicated despite it predispose to infection.

6-ABSCESS: -

Circumscribed swelling containing pus.

***Etiology**

It ensues as a result of infection of certain area by pyogenic microorganism. It may be superficial or deep, and may be located laterally or centrally. Diagnosis is easy and can be confirmed by exploratory puncturing. Abscess may be associated with necrosis of the deep tissues and constitute the first stage of fistulous withers.

***Treatment**

Abscess is treated on the general principles of this affection (maturation, evacuation, and application of drain). Incision shouldn't be transverse to the long axis of the back to avoid gaping of the wound that would be slow to cicatrise. Counter opening may be required.

7-OPEN WOUND: -

***Etiology**

It can be ensue as a result of many objects like sharp, pointed, blunt objects or even gunshot. Wounds may predispose to infection and necrosis of ligament, cartilages, bones of the withers leading to fistulous withers.



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*Treatment

Wounds are treated according to the general principles (recent or old wound).

8-FRACTURE OF THE DORSAL SPINES: -

*Etiology

Usually it is accidental and occurs as a result of falling on the back over hard object. Signs of severe contusion are clear and crepitation can be detected by placing the hand on the affected part during motion of the animal. Stiffness of the shoulders may be evident during progression. Fracture may be simple or compound, and recovery ensue in the former without complication but the later form may predispose to fistulous withers.

*Treatment

Simple fractures of the spines resolves spontaneously with few weeks of rest, and it is advised to apply antiseptic solution over the affected area to avoid infection of the fracture via small hidden abrasions of the skin. Compound fractures need frequent antiseptic irrigation of the wound.

9-FISTULOUS WITHERS: -

It is a sinus or a blind fistula develops in the region of the withers.

*Etiology

It ensues as a result of injury and infection that is followed by necrosis of some of the deep tissues. It is usually ensues as a result of abscess or deep sit-fast. The most affected tissues are the ligamentum nuchae, supra spinatus ligament, cartilages of the dorsal spines, spines, cartilage of prolongation of the scapula, and/or the ribs. Many cases of fistulous withers or poll evil were observed without presence of external exciting cause, and these cases were believed to be due to *brucella* and *filarial* parasites especially when the animal suffers from vitamin E deficiency.



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*Symptoms

Symptoms of fistulous withers are always well marked, and are those of a sinus associated with an inflammatory swelling varying in size according to extent of the lesion, and it is usually painful in manipulation.

The skin shows dermatitis, blood infiltration, excoriation, and necrosis. The subcutaneous tissue shows hematoma which either resorbed under aseptic condition or under go phlegmone if it is infected. The fascia and the muscles show phlegmone or necrosis. The supra spinous bursa on the second or third thoracic spines may be affected with acute serous bursitis and later on it changes to chronic bursitis (hygroma) or purulent bursitis. Spinous processes of the thoracic vertebrae under go ostitis and periostitis.

One or more orifices are present and discharging pus with a quantity directly related to the size of the necrosed area. The disease usually advances from behind forward and from above to below. Suppuration spreads easily in the inter-muscular spaces and it can accumulate behind the scapula. In late cases, fistula of the neck may ensue as a result of spreading of necrosis through the ligamentum nuchae. Rare cases showed penetration of the neural canal or the chest cavity with septicemia.

*Prognosis

It depends up on the location of the lesion (the deeper the lesion and the more anterior the position, the worse the prognosis). Lesions on the summit of the spines in the high withers respond more readily to treatment than that on the low withers as a result of isolated position and better drainage of the former.

*Treatment

Treatment of fistulous withers depends up on providing of good drainage to facilitate escape of the pus, promoting separation and removal of necrotic tissues. Excessive incision is needed in some cases to expose the affected area and to facilitate the contact between the tissues and the antiseptic. Necrotic ligament should be severed in healthy part and removed. If one of the spines undergoes



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caries, removal by saw is indicated. If pus is collected behind the scapula, counter opening inferior and posterior to the scapula is indicated.