

VETERINARY SCIENCE NOTES.

Lameness in the Horse.

(By I. J. L. Wood, Q.D.A.)

The following notes may be of interest to horse-owners in the Territory:—

Lameness is the most common ailment of the horse, and is responsible for about 75 per cent. loss of service.

The majority of cases of lameness is due to either careless or wrong methods of handling, and, thus, a large proportion of loss of services is preventable.

Lameness may be defined as a visible symptom of pain, and at least 80 per cent. results from injuries below the knee and hock, although to the average layman the common seat is located in the shoulder. In actual fact shoulder lamenesses are very rare.

It is marked in progression by definite symptoms commonly known as dropping, indicated when the forequarters are affected, by a lowering of the head and a dropping of the shoulder when the non-affected limb contacts with the ground. When in the hind limb, dropping occurs in the opposite hip to the affected limb.

Horses at rest show signs of pain in the limb by what is termed "pointing". This refers to the position in which the affected limb is held. Where the trouble is below the knee, the foot is usually carried slightly forward; when above the knee, the limb is slightly flexed with the toe resting on the ground slightly behind its fellow.

Lameness may be divided into two classes—

- (1) Those due to traumatic causes, i.e., wounds and bruises.
- (2) Those due to bony unsoundness.

(1) Most cases of lameness are due to wounds, injuries and muscular strains. They are rarely serious and usually respond to the treatment of rest for a few days.

Most strains result in the presence of slightly increased heat in the part and soreness when moved or palpated.

To relieve, apply a cooling lotion and then give absolute rest for a few days. After all inflammatory changes have been reduced the application of a mild stimulant or blister over the part will stimulate the blood supply and hasten recovery.

(2) Perhaps more important than the muscular conditions are those arising from what are termed bone diseases. The common bone diseases are splints, ringbones, spavins and sidebones, though the latter is not truly a bone disease.

Splints.—These are bony enlargements which form between the small and large metacarpal or metatarsal bones. They may form anywhere throughout the small bones, but are usually found in the "middle third". Occasionally, they develop in the vicinity of the knee joint and are then known as high splints, a type which is usually difficult to treat successfully, owing to its proximity to the joint.

Splints are due to concussion. A common cause of splints is coarseness of bone and bad conformation by which concussion is not evenly distributed. Where horses are shod, splints may occur in perfectly developed bone and correct conformation as the result of bad shoeing.

As the result of the concussion, irritation is set up beneath the periosteum causing an exudation of fluids which press on the nerves lying within the

periosteum. At this stage, a splint is painful, particularly at the trot. In course of time, the fluid is impregnated with mineral matter, converting it into bone tissue. Usually, by this time, all symptoms of pain have ceased.

Treatment.—First, rest, with applications of cooling lotions to the affected part. When the inflammation is reduced, use a strong blister compound—one part of biniodide of mercury and four parts of lard or vaseline. The area immediately over the splint should be clipped, then well washed with water and soap to cleanse the pores. A small quantity of the blister should be applied immediately over the enlargement and rubbed into the skin for about ten minutes, after which any surplus blister should be removed. Then surround the area on the sides and beneath with vaseline or lard, thus restraining the action to the desired area. Next tie the animal's head up short and keep it tied up until the blister has ceased to act, usually 5–6 hours. Unless the head be tied up short the animal will endeavour to bite the area, resulting in a blistering of the mouth and tongue. After the action has ceased, wash the area with warm water and soap and then apply grease. This will prevent sloughing of the skin.

Ring Bones.—A bony exostosis occurring on the Pastern bones and interfering with the movement of the joints. When the exostosis involves the Suffraginus coronae articulation it is known as a high ring bone; when the Coronae pedis articulation, a low ring bone. The latter is generally difficult to diagnose, as the area is within the upper border of the wall of the foot.

For ring bone there is no known treatment of curative value. Ring bone is classed as one of the hereditary unsoundnesses believed to be due to faulty conformation.

Spavin.—An exostosis involving the hock joint. The usual situation is the antro-internal aspect of the hock.

Occasionally the position occurs between the bones without external manifestations. This is known as an "occult spavin", a variety which can only be diagnosed by action. An animal suffering from spavins does not carry the limb forward to the full extent and the toe strikes the ground at the end of the movement.

There is no curative treatment. Blistering the affected part relieves the painful stage.

Side Bones.—An ossification of the lateral cartilages situated in the upper border of the wall. Similarly to ring bones and spavins, side bones are classed as hereditary unsoundness. Normally this cartilage should be soft, elastic and springy under pressure. As the result of the inflammatory discharges becoming impregnated with mineral matter, an animal affected with side bones will quickly go lame on roads with hard surfaces, particularly at fast speeds. With ordinary riding on grassed tracks, an animal with side bones rarely suffers inconvenience or lameness therefrom.

Fore limb bones comprise—

The *scapula* or shoulder blade.

Humerus, radius, ulna, carpus (eight small bones).

Metacarpus (one large and two small bones).

Pasterns (3)—*os-suffraginus*, *os-coronae*, and *os-pedis*.

Immediately behind the fetlock joint are two small oval bones (*sesamoids*), and behind the *os-pedis*, the *naviculae*.

