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## **A Pictorial Review of Injuries and Disease Conditions in Foreign and Part-Barb Horses in Northern Nigeria: Part I**

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**Abstract:** Injuries and selected disorders in indigenous and foreign horses used for polo, racing and pleasure horses were reviewed pictorially. This first ever pictorial review in Nigeria reflected multiple equine health problems commonly found in northern Nigeria which comprises clinical cases and post mortem lesions. These have become an important source of wastage in the equine industry in Nigeria.

**Key words:** Injury, horses, disorders, wastage, equine, welfare

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### **INTRODUCTION**

Horse adaptation for elastic energy savings, which is surpassed only by the camel, the breathing which seems to be driven by the bending and extension of the back (Young *et al.*, 1992) and the remarkable sophistication the hoof (Thomason *et al.*, 1992) has made the horses to be of high value to man (Alexander, 2001). The high value of horses has increased their risk for injury and some disorders. Horses involved in polo and racing have a high chance of sustaining sporting related injuries that are traumatic than pleasure horses, though pleasure horses have a high chance of suffering automobile accidents and mere abuse from local handlers and children (Mshelia *et al.*, 2009).

Diseases and disorders like secondary sinusitis (Fig. 1), traumatic injuries (Fig. 2), gonitis (Fig. 3), Congested lungs (Fig. 4), intestinal adhesion (Fig. 5), fecalith (Fig. 6, 7), osteomalacia (Fig. 8), fractures (Fig. 9), tick infestation (Fig. 10), pastern dermatitis (Fig. 11), squamous cell carcinoma (Fig. 12), photodermatitis (Fig. 13), dermal papillomas (Fig. 14), laminitis (Fig. 15), diaphragmatic hernia (Fig. 16), polyneuritis equi (Fig. 17), colic (Fig. 32), tick infestation (Fig. 18), gastrophilus (Fig. 19), injuries around the masseter muscle (Fig. 20), tracheal exudate (Fig. 21), osteodystrophia fibrosa (Fig. 22), carpal hygroma (Fig. 23), abscess (Fig. 24), ulcerative lymphangitis (Fig. 25), dermatomycosis (Fig. 26), African horse sickness (Fig. 27), injury of the pectoral muscle (Fig. 28), piroplasmosis (Fig. 29), tetanus (Fig. 30), injury of the limb (Fig. 31), colic (Fig. 32), granulomatous growth (Fig. 33) are on record in various stables, individual equine practices and very few local

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Fig. 1: Secondary Sinusitis



Fig. 2: Traumatic Injury of the cranial aspect of the thigh as a result of Automobile accident



Fig. 3: Gonitis in an Argentine-Part-Barb Filly as a result of a kick from a mare



Fig. 4: Congested lungs in Part-Barb stallion at post mortem



Fig. 5: Intestinal Adhesion as a result of Fibrin Formation



Fig. 6: Fecalith *in situ*, which ruptured and led to peritonitis in a 9 year Part-Arab stallion



Fig. 7: Fecalith after removal from colon



Fig. 8: A suspected case of osteomalacia



Fig. 9: Chip fracture of the tuber coxae



Fig. 10: Tick infestation of caudal pastern area



Fig. 11: Pastern dermatitis



Fig. 12: Squamous cell carcinoma involving superior eye lid in 9 year old part Arab with intact eye

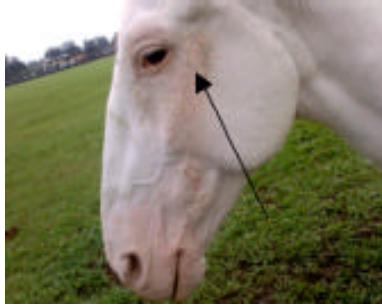


Fig. 13: Photodermatitis albino Polo Stallion

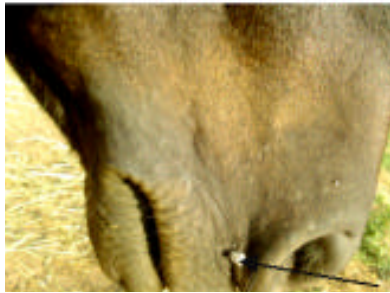


Fig. 14: Dermal papilloma



Fig. 15: Laminitis

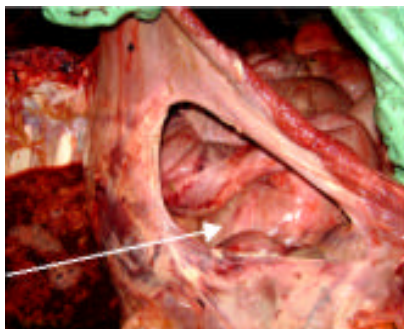


Fig. 16: Diaphragmatic hernia

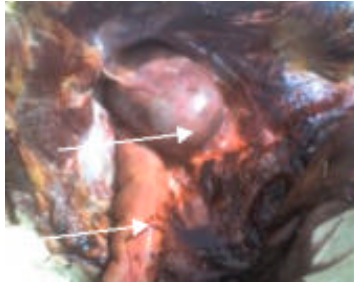


Fig. 17: Polyneuritis equi; distended bladder and rectum in a 10 year old Part-Arab racing horse



Fig. 18: Tick infestation at the base of the tail



Fig. 19: Gastrophilus in the stomach



Fig. 20: Traumatic injury around the masseter as a result of automobile accident

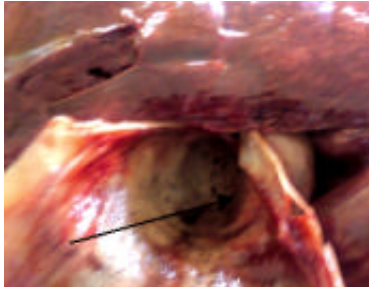


Fig. 21: Exudate in trachea

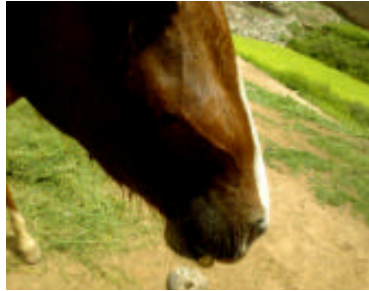


Fig. 22: Osteodystrophia fibrosa (big head disease)



Fig. 23: Hygroma of the carpal joint with a bench knee



Fig. 24: Abscess as result of intramuscular injection



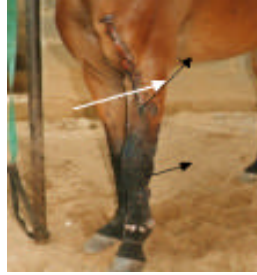


Fig. 25: Ulcerative lymphangitis



Fig. 26: Dermatomycosis



Fig. 27: African Horse Sickness (AHS) Vaccine failure-edema of supraorbital fossa, Nasal and ocular discharges



Fig. 28: Traumatic injury of the pectoral region as a result of automobile accident in a pleasure horse

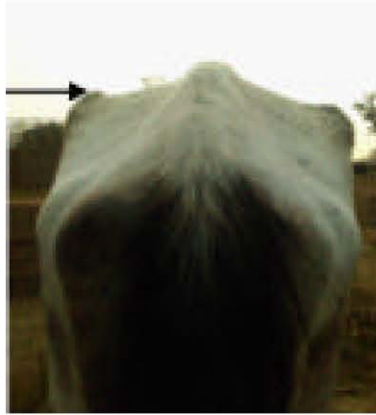


Fig. 29: Emaciation in a horse with chronic Piroplasmosis with a body score 2



Fig. 30: A case of tetanus



Fig. 31: Injury of the right forelimb



Fig. 32: Colic as seen in a horse rolling



Fig. 33: Granulomatous growth (proud flesh)

scientific journals in Northern Nigeria (Mshelia *et al.*, 2008a, b, 2009; Kwanashie and Abdullahi, 1992; Useh *et al.*, 2005; Sambo *et al.*, 2008; Okege, 1977; Addo, 1980; Oladosu *et al.*, 1993; Folorunso *et al.*, 2008).

Single equine health problems have been reported in Northern Nigeria by Mshelia *et al.* (2008a), Kwanashie (1983), Addo (1980) and Okege (1977), while multiple health problems was also reported by Alhaji (1975).

Similarly, at international level also a number of equine health problems in equine populations have been reported. However, most of these studies dealt with single health problems (Prescott *et al.*, 1984; Dunsmore and Jue Sue, 1985; Rossdale *et al.*, 1985; Bell and Lowe, 1986; Brostrom *et al.*, 1987; Traub-Dargatz *et al.*, 1988; Sandgren *et al.*, 1993; Cohen *et al.*, 1994). This is the first pictorial review on equine health problems in Nigeria aimed at initiating a study on the prevalence of equine disorders in the nearest future.

### **CONCLUSIONS AND CLINICAL RELEVANCE**

Considering the fact that no equine animal health monitoring and surveillance system has been developed in any country on either a state or national level (Kaneene *et al.*, 1997), it has become imperative to initiate a review like this in order to stir up research in study of risk factors and prevalence of injuries and disorders in horses with the sole objective of developing and implementing strategies towards prevention of injuries and death in horses in the Nigerian Equestrian Industry.

These are important sources of wastage to the equine industry (Jeffcott *et al.*, 1982) and raised similar concerns for animal welfare (Hopes, 1984).

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