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CASE REPORT ON LAMENESS IN BROILER CHICKEN RESULTING INTO SETTING OF LEGS APART AND ITS TREATMENT

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ABSTRACT

The most commonly raised poultry is chicken reared to produce eggs and high quality meat. Poultry especially use for meat production are called Broiler chicken. The multi-factorial lameness is one of the important diseases of broiler chicken leads to mortality and economics loss of poultry Industries. In present case report we found that few numbers of broiler chickens were suffering from lameness and as a treatment all aspect has been followed to ameliorate the disease. Fastest growing leg bone of broiler chickens of different age groups receive lameness followed by setting of legs apart and the condition is called spraddle leg. As the disease is multifactorial, therefore treatment for spraddle legs should covers all etiological aspect viz. use of vitamins, minerals, anti-stress agents, antibiotics and managemental correction. Along with these said treatment, fabricated tapes were applied to keep both the legs (lameness) in actual posture. Keeping the fact in mind that lameness is multifactorial disease thereby treatment should covers all etiological factors and using fabricate tape played a key role to cure the disease.

KEYWORDS: Vitamins, minerals, anti-stress agents, antibiotics, managemental correction.

INTRODUCTION

Broiler farming is transforming the world's meat Industry and greatly influencing economy of the country like India. The words leg problems, leg weakness, leg disorders or lameness are used interchangeably for gait problems in broiler chicken. It is a multi-factorial disease which results in gait abnormalities. The factors participating in leg problem are genetics (Kestin *et al*., 2001), high initial growth (Bokkers & Koene, 2004), long time sitting of birds

(McGeown *et al*., 1999), environmental and manage-mental factors (Borges *et al*., 2003; Dawkins *et al*., 2004, Edward Jr., 2000), leg weakness (Angel, 2007), rearing of chicks under 24 hours artificial lighting (Gordon & Tucker, 1995). Birds were kept in constant light to increase the feed intake to maximizes growth rate and preventing them from proper night period adversely affect their health status consequently give rise leg abnormality (Edwards & Veltman, 1983; Moller *et al*., 1999). Many scientific literatures disclose a strong relationship between occurrence of lameness and rapid growing strain of broiler chicken (Julian, 1998). Animal spent more time in sitting posture develop lesion of underneath area and influencing the health status of birds (McGeown *et al*., 1999; Vestergaard & Sanotra, 1999). Ultimate outcome of leg deformities reduces the growth rate which leads to economic loss of poultry Industry. Usual treatment protocol that has been followed in a poultry farm is to prevent lameness by using medicines. However, medicines are not able to ameliorate the spraddle leg condition in broiler chicken prevailing in the farm. Therefore an alternative way has been adopted along with medicines to minimize the spraddle legs problem.

CASE REPORT

Leg bones are fastest growing bone of the body and needs adequate minerals, vitamins along with proper management of lighting, temperature and infection free environment. Any disturbances in mentioned setup give rise to leg disorders of different degree. Broiler chicken of different age groups is likely to suffer from lameness till to be sold out in the market. Lameness further proceeded to setting apart of legs called spraddle legs and birds are unable to sustain body weight. Further condition get aggravated due to anorexia and congestion of lie down area which resulted to mortality.

Causative agents

Multiple etiologies are interlinking to produce lameness in broiler chicken. Factors which lead to foot disorders include nutritional deficiency, old hatching eggs, low humidity, slippery brooding surfaces, wet litter, improper diet, genetic disorder, lighting period, fast growing breeds, infectious and noninfectious disease/gout etc.

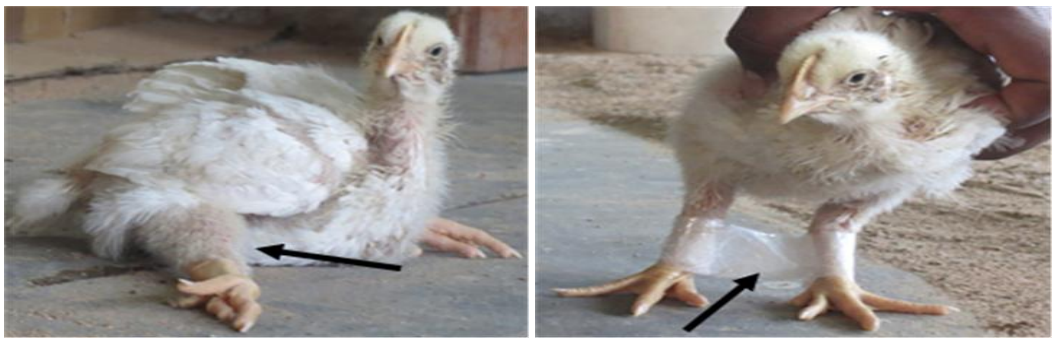
Treatment

As the disease lameness is multiple etiological in origin require treatment which nullify all etiological factors. In a good broiler farm all types of medicines has to be included as a way of treatment that helps to prevent the occurrence of lameness problem.

Some of the broiler chicken of different age group of poultry farm of Veterinary & Animal Sciences, Institute of Animal Sciences, Banaras Hindu University were suffering from lameness (**fig.1.a & 2.a**). Diseased birds were separated from the herd and individual feeding and watering has been performed. As a treatment measures which include further improvement in managemental practices, inclusion of nutritional supplement vitamins/minerals and anti-stress agents, use of antibiotics at therapeutic dose were done. Also entry of infectious organism through drinking water was checked. These therapeutic agents were not sufficient to cure the lameness of those birds suffering from spraddle legs. However improvement in condition was seen after introducing a fabricated tape that keep legs in symmetry and helps to set spraddle legs to right posture (**fig.1.c & 2.b**). Therefore, the conclusive finding of present case is to improve the condition of spraddle legs in a better way by using medicines along with pasting of fabricated tape to keep the legs in uniformity.

a. Spraddle legs **b. Treated leg** **c. Treated leg**

Fig.1. Showing the spraddle legs in six days old broiler chicks and treated leg



a. Spraddle legs **b. Treated leg**

Fig.2. Showing the spraddle legs in two weeks old broiler chicks and treated leg

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