Growth plate lesions in fattening bulls

Lameness is considered an important welfare and economic problem of beef cattle farms. Young beef bulls selected for rapid increasing in weight are susceptible to develop lesion of the growing skeleton. The growth plate is a site commonly affected by diseases in these animals and the etiopathogenesis of lesions in this site has been associated with rapid growth and high weight increase, traumatic injuries, environmental conditions, toxicosis, mineral imbalances in the diet and genetic causes.

In this paper the distal metatarsal growth plate of 62 fattening bulls belonging to two farms of the north-east of Italy have been examined. The clinical presence of lameness and the associated presence of lesions in the distal metatarsal physis were evidenced with radiology, necropsy and histopathology.

**HISTOPATHOLOGIC ASPECTS**

*Osteochondrosis:* severe, segmental or diffuse, retention of the hypertrophic zone characterized by enormously long columns of hypertrophic chondrocytes and by disorganized hypertrophic columns that appeared disposed in groups and clusters, instead of regular rows, and occasionally by lysis of the cartilaginous matrix.

*Purulent and necrotizing physisis:* disruption of the growth plate by multifocal to diffuse infiltrate, composed of numerous neutrophils, by coagulative necrosis and hemorrhage, often surrounded by granulation tissue.

**PUBLICATIONS AND PROCEEDINGS OF CONFERENCE:**


