Neurologic Signs in Broilers Associated with Myopathy Lesions Hurst-Proctor, Sabrina, Gaydos, T., Fletcher, O.

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An integrated broiler company in the southeast reported sporadic flocks of broilers with neurologic signs and lameness. The age of presentation was variable, but most commonly was approximately 19 days of age. The affected barns had increased mortality up to four birds per thousand. Upon physical evaluation, the birds had tremors, torticollis, and were unable to stand. Affected birds were humanely euthanized and necropsied. The birds were grossly normal excluding soft bones and severe tibial dyschondroplasia. These findings stimulated an investigation into feed ingredient quality. During this investigation, it was discovered that there was variability in meat and bone meal calcium and phosphorus ratios from one of the suppliers. The nutritionist was notified of these findings and changes were made in the supplier of meat and bone meal. Three weeks after the initial cases, another visit was made and new flocks were seen affected with these symptoms. At this visit, gross striations were noted in the pubo-ischio-femoralis muscle of affected birds. Samples were taken and histopathology showed multifocal to multiregional myopathy consistent with pathologist suspected ionophore toxicity. However, ionophore toxicity was considered extremely unlikely because of the long term exclusion of ionophores from the system. Six weeks from the initial visit, ten birds from another flock were submitted for blood chemistry and necropsy and details are provided in this presentation. Ultimately, cases ended approximately 9 weeks after initial findings without further action.