



Worthwhile Operational Guidelines & Suggestions

BROILER PROCESSING TIMELY INFORMATION – SEPTEMBER 2005

Craters on the skin?

Skin tumors or squamous cell carcinoma have been an important source of carcass condemnations. The inspection regulations in the US mandate trimming of a single skin tumor, but condemnation of the whole carcass with two or more skin tumors due to the likelihood of metastasis. The lesions of squamous cell carcinoma are rarely detected on broiler chickens prior to processing. Once the feathers are removed, crater-like but non-malignant lesions are typically observed on the neck, back and legs (See figure). The lesions are 1-2 cm in diameter and often penetrate the dermis.

The etiology of the squamous cell carcinoma is not well defined. There is no gender difference in the tumor incidence and lesions typically regress with age. It has been difficult to isolate viruses and/or reproduce the lesions experimentally. The tumors are thought to originate from folliculitis as cystic proliferations of feather follicles on the skin. Certain chemicals, such as methylcholanthrene, can reproduce similar skin lesions, but direct contact of broiler chickens with such chemicals is very unlikely under commercial conditions. The



squamous cell carcinoma is most severe in winter months when the environmental conditions are less than optimal and condemnations from Marek's disease are most severe. So far, no direct relationship to Marek's disease or a certain breed is proven. Repeat problem farms with high tumor condemnations may benefit from successive total cleanout and disinfection programs.



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