Isolation of Salmonella Spp from Apparently Healthy Ostriches in East Azerbaijan Province

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Background & Objectives: An emerging public health hazard requiring immediate attention is food safety. Ostrich farming in Iran today plays a major role in agricultures, food production, regional economy and public health. Salmonellosis is the most important zoonoses diseases that cause diarrhea and systemic infections. The presence of pathogenic microorganisms such as Salmonella species, Campylobacter species and *E. coli* on foods and food production animals such as ostriches poses a food poisoning threat. The aim of this study was to investigate the number and type of enteric pathogens present on intestinal tract of apparently healthy Ostriches.

Methods: 14 samples were collected from gastrointestinal tract. Samples of both homogenized intestinal tissues and Contents were cultured in Rappaport medium. These samples were incubated at 37 °C for 18 h, and then each sample was inoculated onto Salmonella-Shigella agar (SS) plates and incubated at 37 °C for 24h. Suspicious colonies morphologically similar to Salmonella were sub cultured for biochemical and PCR examination.

Results: Salmonella was isolated from 4 (28.57%) of 14 samples. The most common other isolated entero pathogen were *E. coli*, *Proteus spp* and *Shigella spp*. It is accepted that GI micro flora of meat production animals posses an important role in cross contaminations other food and household.

Conclusion: This study showed salmonella prevalence among Ostriches is noticeable and certainly poses an occupational risk to farmers, veterinarians, zoological gardens and food chain employees. In other hand Information about the micro flora of Ostriches is essential for better understanding of ecological changes, full productivity of this animal, prevention of zoonotic disease, food safety and fighting with contamination and spoilage of ostrich's meat.

Keywords: Zoonotic Disease; Ostrich Salmonella