Lecture title: Salmonellosis. Lecture 3.

Lecturer Affiliation:

Diagnosis;

In addition to the clinical signs and lesions, S. gallinarum should be isolated and identified for diagnosis. It should be carefully differentiated from other salmonella and Enterobacteriaceae organisms.

Vaccination:

The use of the 9R strain as live oral or injectable vaccine, with or without oil adjuvants, have been reported with variable results.

Similarly, outer membrane proteins from S. gallinarum have been reported to offer better protection than the 9R live vaccine in terms of clearance of the pathogenic strain from internal organs.

Treatment:

Reasonably effective prophylactic and therapeutic drugs have been developed.

- Quinolones (Enrofloxacin, ciprofloxacin, levofloxacin, …. etc).
- Sulfonamides (sulfadiazine, sulfamerazine, sulfathiazole, sulfamethazine, and sulfaquinoxaline).
- Nitrofurans, chloramphenicol, tetracyclines, and aminoglycosides have been found to be effective in reducing mortality.

However, no drug or combination of drugs has been found capable of eliminating infection from a treated flock.

(Note: Sulfonamides, in particular, frequently suppress growth and may interfere with feed and water intake and egg production.)

Spraying eggs with neomycin sulfate prior to incubation has also been helpful in controlling PD in chicks.

Dipping contaminated eggs in antibiotic solution containing 400 ppm and 800 ppm of gentamicin was helpful in controlling S. gallinarum in eggs.