UNIVERSITY of GUELPH
LABORATORY SERVICES
Animal Health Laboratory

FINAL Report
Case# **K19-032024**
Reported: 2019-Apr-29

Submitted By:
Client ID: **1003373**
PERTH & WESTPORT VPC
DR SCOTT ROBERTSON
118 SUNSET BLVD PO BOX 631
RR 4 (CHRISTIE LAKE RD)
PERTH, ON K7H 3K4

Phone: 613 267-7373
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Owner:
GARRY MELLAN
13 DEVIL LAKE RD
WESTPORT K0G 1X0

Animal ID: **Not Given**
Species/Breed: Chicken, Domestic
Commodity: Chicken, exhibition/small farm flock
Herd/flock Size: 15 At Risk: 11 Sick: 0 Dead: 3
Age: 2 Year(s) Sex: Female

Specimen Taken Date: 2019-Apr-27
Specimen Sent Date: 2019-Apr-29
Specimen Received Date: 2019-Apr-29
Project #: AHL4
Specimen(s) received: carcass

HISTORY
"Died Saturday April 27 2019.
Recently released free range. Observed a weak and distressed bird Thursday, later found dead early afternoon with a pale comb. Examined internally found hemorrhaging in abdominal cavity. Liver yellow and disintegrated easily. Second bird found dead in coup Friday morning same signs. Third bird found mid afternoon Saturday deceased and stiff was forwarded for examination."

FINAL DIAGNOSIS(ES):

1. **Fatty liver hemorrhage**

Case Summary

This bird most likely died as a result of acute intra-abdominal hemorrhage and hemorrhagic shock secondary to a focal rupture in the liver capsule. Rupture of the liver capsule and hemorrhage within the liver lobe was probably due to the marked tissue friability as a result of extensive hepatic fatty infiltration. The bird appears to have been eating well and the extensive mobilization and retention of fat in the liver was probably due to over conditioning and associated energy store mobilization with the onset of egg laying rather than a period of anorexia or starvation.

Case Coordinator: Heindrich Snyman BVSc DVSc Diplomate ACVP, Animal Health Laboratory snymanh@uoguelph.ca

Postmortem **Method ID:AHL-002**

Date Authorized: 2019-Apr-29 14:47

Postmortem performed by: Dr. Heindrich N. Snyman
Start time, end time, and date of postmortem: 01:30 to 02:05 pm, 29 April, 2019
Photographs: No
Diagnostic imaging: No

Animal identification: A single female Wyandotte layer chicken hen, weighing 2313 grams, was received for post mortem evaluation.

External findings: The bird is over conditioned with abundant subcutaneous and internal fat stores, adequate pectoral muscle mass, and normal hydration status. The comb and pectoral muscle appears pale.

Internal findings: The left cranial abdominal cavity contains ~ 70 ml of frank clotted blood. The blood encircles the left liver lobe and extends between the interlobular fissures and the adjacent mesentery of the gizzard. The blood clot is traced back to a single ~ 5 mm

Postmortem **Method ID:AHL-002 ....Continued**

Date Authorized: 2019-Apr-29 14:47

capsular rent along the medial aspect of the visceral surface of the left liver lobe. The adjacent hepatic parenchyma is mottled with hemorrhage which affects ~ 60% of the entire left liver lobe. The remainder of the liver is diffusely pale tan, is markedly friable, and the parenchyma is easily torn by minimal manipulation or digital pressure. There is extensive lipid deposition within the abdominal mesenteries and the pleural surfaces of the heart and lung are covered by a ~ 1 to 2 mm thick layer of friable fat. The lung contains diffuse mild congestion. The spleen is diffusely pale, small, and contracted. The bird is in lay with various stages of follicular development and a single mineralized egg in the oviduct. The gizzard and proventriculus contains small amounts of ingested grain and the remainder of the gastrointestinal tract contains moderate amounts of olive green fibrous to pasty ingesta/feces. The femoral nerves and brain appear unremarkable.

Post Mortem diagnosis:
1. Liver: hepatic lipidosis, diffuse, chronic, severe, with focal capsular rent, regionally extensive left liver lobe hemorrhage, and intra-abdominal hemorrhage.
2. Spleen: splenic smooth muscle contraction, diffuse, acute, severe.
3. Lung: pulmonary congestion, diffuse, acute, mild.
4. Whole body: over conditioning, diffuse, chronic, severe.

Comments: This bird most likely died as a result of acute intra-abdominal hemorrhage and hemorrhagic shock secondary to a focal rupture in the liver capsule. Rupture of the liver capsule and hemorrhage within the liver lobe was probably due to the marked tissue friability as a result of extensive hepatic fatty infiltration. The bird appears to have been eating well and the extensive mobilization and retention of fat in the liver was probably due to over conditioning and associated energy store mobilization with the onset of egg laying rather than a period of anorexia or starvation. Fat infiltration can be further confirmed through histopathology. Please let me know as soon as possible if you would like to pursue any such additional testing.

Tissues held: spleen, liver, kidney, lung, trachea, brain

Pathologist: Heindrich Snyman BVSc DVSc Diplomate ACVP Animal Health Laboratory snymanh@uoguelph.ca

Communication History

Report date	Contact	Reported tests
2019-Apr-29 11:42	reception@perthvet.ca, technicians@perthvet.ca,office@perthvet.ca	
2019-Apr-29 14:53	PERTH & WESTPORT VPC	Postmortem
2019-May-08 13:26	PERTH & WESTPORT VPC	Postmortem

Case Coordinator: Heindrich Snyman BVSc DVSc Diplomate ACVP, Animal Health Laboratory snymanh@uoguelph.ca