What Is Your Diagnosis?

History

A 3-year-old female chicken presented for a 3-week history of progressive coelomic distention. Over the 36 hours prior to presentation, the patient was lethargic, showed progressive weakness, and had a decreased appetite. The patient had last laid an egg 2 months prior to presentation, and was otherwise healthy with no previous health concerns. On presentation, the patient was quiet, alert, and responsive, with a decreased body condition score (keel score 2/5) and was 5% dehydrated based on decreased skin turgor. The patient’s respiratory rate and effort increased with the stress of handling, but heart rate was low-normal. The skin at the caudal aspect of the keel had hyperkeratinization. The coelom was severely distended and firm on palpation, with a large region of patchy feather loss and erythema caudoventrally. Surrounding the vent extending to the ventral coelom, fetid-smelling, white to yellow cloacal discharge and staining were present. The feather quality was poor with broken primary feathers on both wings and tattered feathers over the remainder of the body.

Physical examination findings were consistent with coelomic effusion. The skin lesions were suspected to be secondary to mechanical injury from the degree of coelomic distention resulting in sagging against the ground; trauma from conspecifics was also considered. Based on physical examination findings and clinical history, a coelomic ultrasound was performed (Fig 1).

Figure 1. Transcoelomic ultrasound of a female chicken with coelomic distension in standing position, and the transducer oriented in a longitudinal direction on the brood patch, cranial to the left and caudal to the right.

Please evaluate the history, physical condition findings, and Figure 1. Formulate a list of differential diagnoses and consider other diagnostic tests before proceeding.