

# Abdominal wall mass in a dog

**Oriol Jornet-Rius**<sup>1</sup>, Beatriz Pérez Agulla<sup>1</sup>, María Cristina López López<sup>2</sup>, Claudia Viñeta Viladecans<sup>2</sup>, Bárbara Serrano<sup>3</sup>, Anna Palomares Solà<sup>2</sup>, Alicia García Ferrer<sup>2</sup>, Laia Solano-Gallego<sup>1</sup>

<sup>1</sup> Department of Animal Medicine and Surgery, Facultat de Veterinària, Universitat Autònoma de Barcelona, 08193 Bellaterra, Barcelona, Spain.

<sup>2</sup> Hospital Clínic Veterinari, Universitat Autònoma de Barcelona, 08193 Bellaterra, Spain

<sup>3</sup> Servei de Diagnòstic de Patologia Veterinària, Facultat de Veterinària, Universitat Autònoma de Barcelona, 08193 Bellaterra, Barcelona, Spain.

Oriol Jornet Rius – oriol.jornet@uab.cat

## Specimen

Abdominal wall mass aspirates and biopsy specimen touch imprints.

## Signalment

11yo, neutered female, Golden Retriever.

## History

The dog was admitted due to the presence of a slowly progressive growing mass detected three months before initial presentation on the ventral abdomen.

## **Clinical findings**

The presence of a 3 cm nodule, initially described as subcutaneous was confirmed during the physical examination. No other abnormalities were found on the physical examination. The lesion was located on the rectus abdominis muscle, slightly to the right of the midline. It was characterized by being hard in consistency and to be adhered to surrounding tissues.

## **Diagnostic procedures**

Complete blood count (CBC) and biochemistry showed no abnormalities. A fine needle aspirate (FNA) of the sample was performed and sent for cytological evaluation (figures 1-4).

Based on the cytological findings a complete work-up including thoracic radiographs, abdominal ultrasound, and computed tomography (CT), was performed prior to an en bloc surgical resection. Imprint touch slides from the biopsy specimen were prepared right after surgical excision (figures 5-7).

### **- Mass and abdominal ultrasound:**

Abdominal ultrasound and thoracic radiographs were unremarkable.

The mass was hypoechoic, slightly heterogeneous, and had well-defined margins. It was circumscribed between the muscular layers of the ventral abdominal wall and measured about 2cm in diameter.

### **- Computed tomography:**

A soft tissue-attenuating nodule of 2cm in diameter was identified at the level of L3, in the rectus abdominis muscle, affecting both internal and external layers. The lesion showed moderate heterogeneous contrast enhancement and did not extend the peritoneal cavity (figures 9-10).

In the thoracic cavity, a rounded soft tissue-attenuating lesion of 5mm in diameter and moderate contrast enhancement was observed in the right cranial lung lobe. Differential diagnoses included metastatic nodule, granuloma, or fibrotic lesion. Follow-up CT was recommended to better characterize this lesion.

## Questions

- 1.- Describe the cytological findings of both aspirate and touch imprints
- 2.- Based on the cytological findings, list the most likely differential diagnosis

## FIGURES

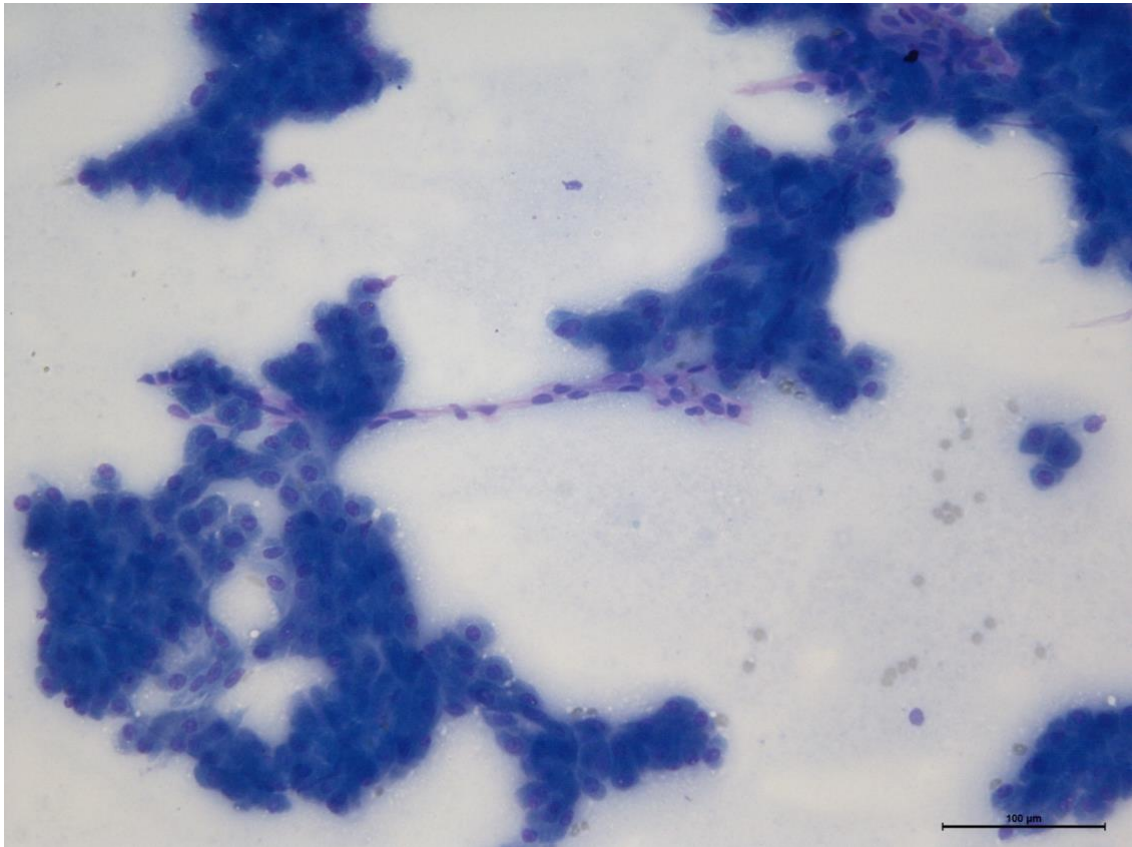


Figure 1.- **Abdominal wall mass FNA**; modified rapid Romanowsky-stain (Quick Panoptic®) (x200)

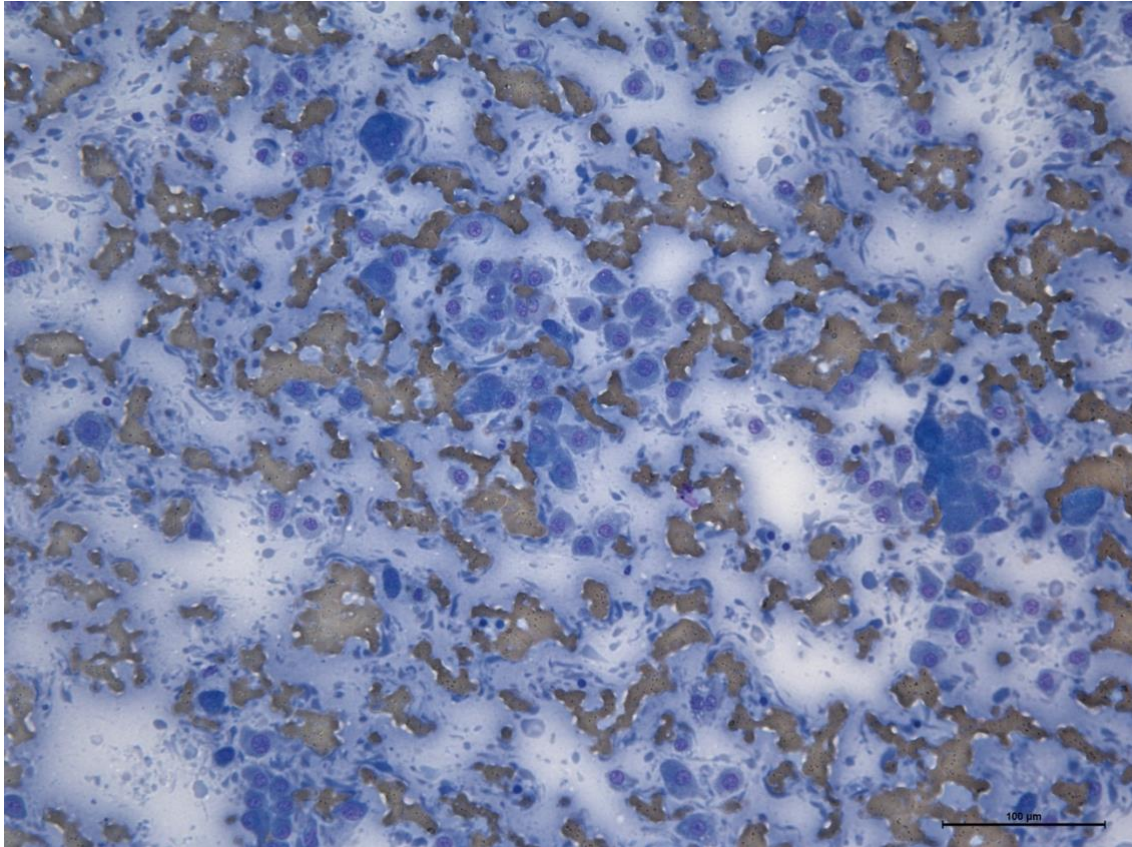


Figure 2.- **Abdominal wall mass touch imprint**; modified rapid Romanowsky-stain (Quick Panoptic®) (x200)

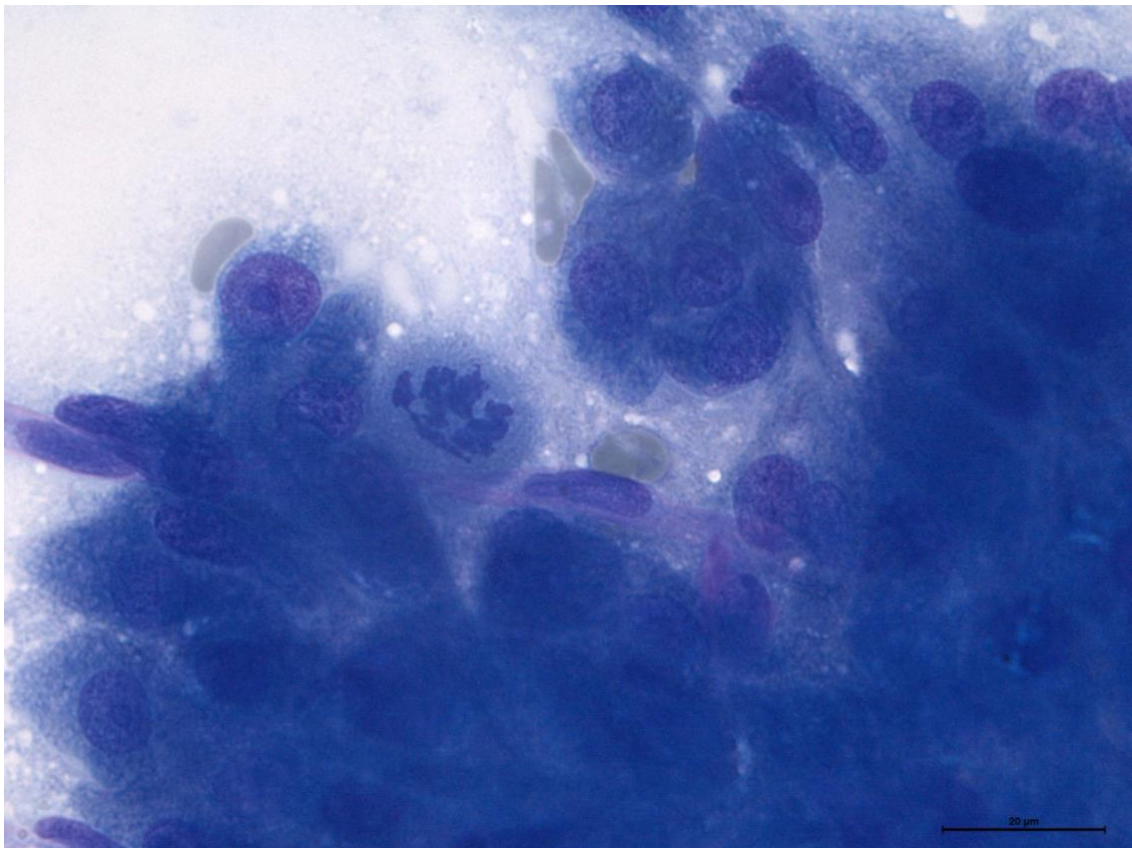


Figure 3.- **Abdominal wall mass FNA**; modified rapid Romanowsky-stain (Quick Panoptic®) (x1000)



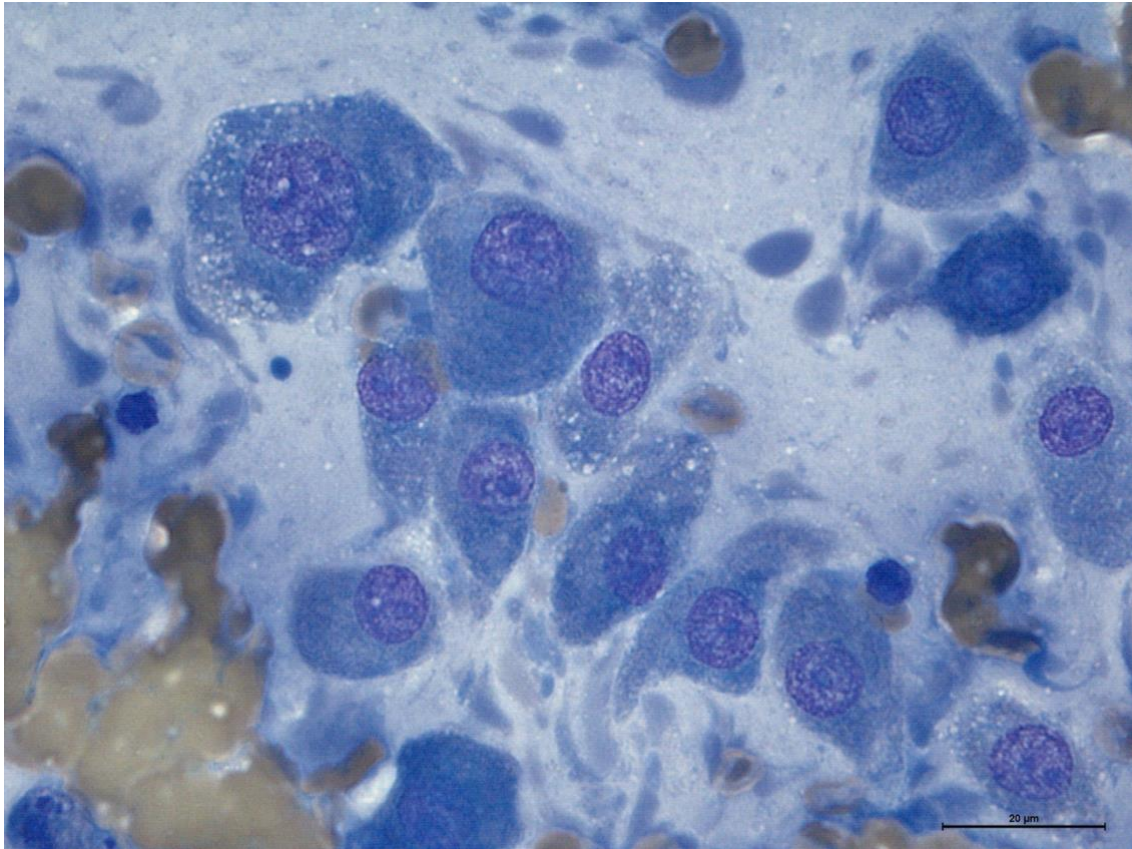


Figure 4.- **Abdominal wall mass touch imprint**; modified rapid Romanowsky-stain (Quick Panoptic®) (x1000)

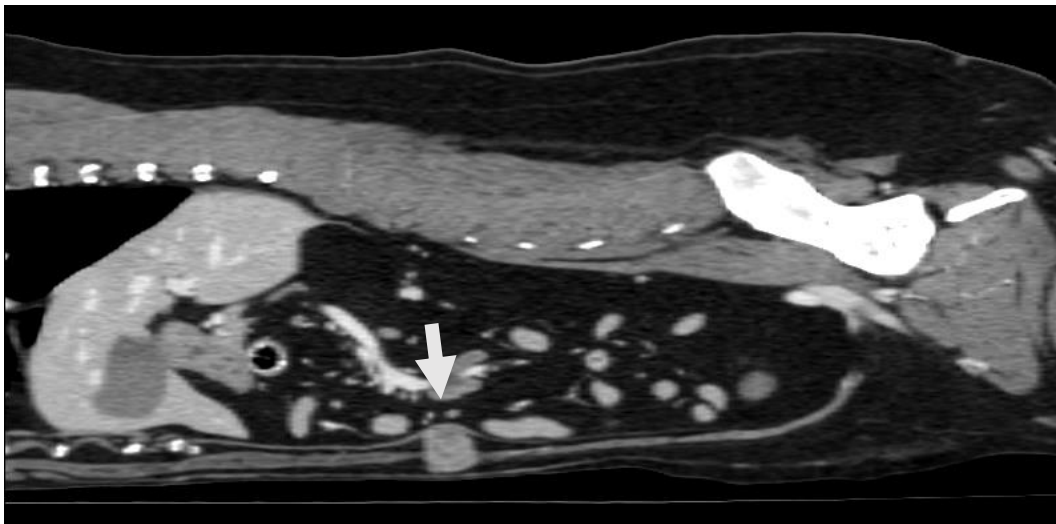


Figure 5.- **Post contrast sagittal CT reconstruction in soft tissue window.** The soft tissue-attenuating nodule (white arrow) is located around 8 centimeters caudal to the liver.



Figure 6.- **Post-contrast transverse CT image at the level of the kidneys.** The soft tissue-attenuating nodule (white arrow) is located between the internal and external layers of the rectus abdominis muscle without extending into the abdominal cavity.