

## 18FDG-PET/CT Features of Canine Primary Splenic Plasmacytoma

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**Signalment:** An 8-year old, castrated Shih-Tzu dog was referred for assessment of the splenic mass by using fluorine-18 fluorodeoxyglucose positron emission tomography combined with computed tomography (18FDG-PET/CT). The dog has been tentatively diagnosed as primary splenic extramedullary plasmacytoma or multiple myeloma based on CBC, serum chemistry, radiography, ultrasonography and histopathological examinations by referring veterinarian. 18FDG-PET/CT was performed for differential diagnosis to rule out metastasis prior to splenectomy.

**Results:** There was no evidence of metastasis or bone marrow involvement on 18FDG-PET/CT images. Standard uptake value (SUV) of the spleen was 4.83, which exceeded the normal range. Based on these results, the dog was diagnosed as splenic extramedullary plasmacytoma, and splenectomy was performed. In the post-surgery checkup in 1 week, the chief complaints including hyperglobulinemia were resolved.

**Clinical relevance:** 18FDG-PET/CT is found to be a useful modality for evaluation of tumor features such as metastasis status in small animal practice.

**Key words:** splenic extramedullary plasmacytoma, 18 F-FDG PET/CT, SUV, dog