Question 45 – June 10

A 51-year-old male underwent a routine colonoscopy and was found to have a firm sub-epithelial lesion in rectum (left image). On rectal EUS, the lesion was found to be originating from the muscularis propria (right image). An EUS guided FNA was performed which revealed spindle cells that stained positive for CD117.

The diagnosis is:

A. Leiomyoma
B. GIST
C. Schwannoma
D. Lymphoma
E. Carcinoid

Answer: B

GIST is a sub-epithelial lesion arising from the interstitial cells of Cajal in the muscularis propria. The lesion is typically hypoechoic with occasional cystic spaces indicating necrosis in large or malignant lesions. FNA is typically required for diagnosis. The lesion is vascular and sometimes difficult to get a tissue diagnosis on FNA. Spindle cells that stain for CD117 (C-Kit) is the hallmark histopathological and immunohistochemistry finding that diagnoses GIST. Leiomyoma and Schwannoma can arise from muscularis propria and have spindle cells on histology. Leiomyoma stains positive for Desmin and Vimentin, while Schwannoma stains positive for S-100 and other neurological immunohistochemistry stains.