Histopathologic Features: The cell block showed monomorphic cellular clusters arranged around sinusoidal spaces (Figure 3). The differential diagnoses considered were low-grade neuroendocrine tumor (LGNET), epithelioid gastrointestinal stromal tumor (GIST), leiomyoma, poorly differentiated carcinoma (PDCA), hemangiopericytoma (HPC), perivascular epithelioid cell tumor (PEComa), and paraganglioma.

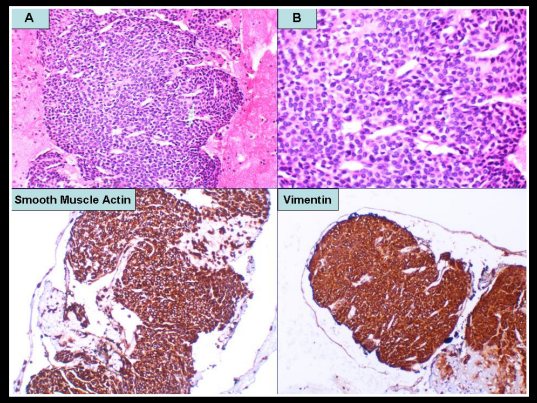

Figure 3

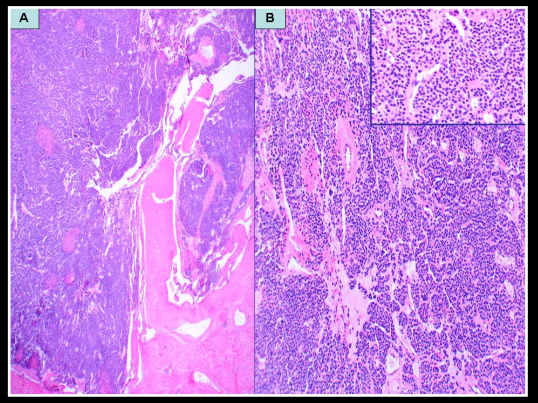

Figure 4

Immunohistochemical (IHC) Features: The cells revealed strong immunoreactivity for smooth muscle antigen and vimentin (Figure 3), and were negative for desmin, HMB-45, S100, CD34, c-kit (CD117), DOG-1, chromogranin, synaptophysin, CD56, and pancytokeratin (panCK). Negativity for neuroendocrine markers (chromogranin, synaptophysin, and CD34) and cytokeratin makes a neuroendocrine neoplasm and PDCA highly unlikely. CD117, DOG-1, and CD34 negativity argued against a GIST and HPC. HMB-45 and S100 negative staining, excluded PEComa and paraganglioma, respectively. The desmin (-)/actin (+) immunophenotype was unusual for a leiomyoma, but was compatible with that of a glomus tumor (GT), as did the morphology.

Subsequently, the diagnosis was confirmed on endoscopic submucosal resection (ESMR) (Figure 4). Neither the cytologic preparation nor histologic sections revealed any features of malignancy, such as mitotic figures, necrosis, high nuclear grade, or infiltrative growth pattern. The patient is on follow-up care, and has been doing well for the last 23 months.

FINAL DIAGNOSIS

Gastric Glomus Tumor.