HEMANGIOBLASTOMA OF THE GASTROINTESTINAL TRACT

Andrea Casadei Gardini¹, Federica Pieri³, Pietro Fusaroli², Alessandro Passardi¹, Manlio Monti¹, Paola Rosetti¹, Sebastiano Calpona¹, Martina Valgiusti¹, Angela Ragazzini¹ Marianna Ricci¹, Giovanni Luca Frassineti¹.

- 1 Istituto Scientifico Romagnolo per lo Studio e Cura dei Tumori, Via Piero Maroncelli 40, 47014 Meldola (FC), Italy
- ² Department of Clinical Medicine, GI Unit, University of Bologna/Hospital of Imola, Italy
- 3 Pathology Unit, Morgagni-Pierantoni Hospital Forlì, Italy

We present the first documented case of hemangioblastoma located in the left gastrointestinal tract in a 75-year-old woman. In May 2009, the patient, whilst undergoing adjuvant chemotherapy for breast cancer (pT2, pN2a M0), reported rectal bleeding, which caused significant anemia (Hb = $7.8 \, \mathrm{g} \, / \, \mathrm{dL}$). Colonoscopy was performed, revealing a roundish mass covered with normal mucosa at the level of the sigmoid colon; the remaining colon was normal. Endoscopic biopsies of the mass were unrevealing. Endoscopic ultrasound (EUS) was performed using a 12 Mhz miniprobe, showing a isoechoic lesion originating from the 3^{rd} layer of the wall (submucosa) while the underlying layers were normal. The lesion was $14 \, \mathrm{x} \, 11 \, \mathrm{mm}$ in size and its echotexture was homogeneous. As the EUS aspect was not strongly suggestive either of cancer or malignant stromal tumor, follow up was advised. At 6-month follow up, both endoscopic and EUS pictures were unchanged. Subsequently, due to repeated lower gastrointestinal bleeding episodes, the patient underwent left hemicolectomy in October 2010. Grossly a sharply circumscribed submucosal yellowish nodule of $13 \, \mathrm{mm}$ was obnserved which was not attached to any peripheral nerve.

Histologically, the lesion was composed of large, atypical cells traversed by a network of blood vessels. Numerous cells had highly pleomorphic nuclei and a finely vacuolated cytoplasm. Immunohistochemically, the cells showed strong positivity for inhibin and NSE and weak positivity for S-100. A diagnosis of hemangioblastoma of the gastrointestinal tract was made. Given the rarity of this tumor and the patient's history of breast cancer, genetic studies will be carried out to identify possible gene mutations. The diagnosis is based on the presence of typical morphology and immunophenotype. The recognition of hemangioblastoma depends in large part upon awereness of the lesion but it is so rare in extraneural sites that it is highly probable that this neoplasm may not even be included as a differential diagnosis. Probably this diagnosis must be take in consideration in submucosal bleeding lesions.