GASTROINTESTINAL SCHWANNOMA: CASE REPORT

Schwannoma gastrointestinal: relato de caso

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INTRODUCTION

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chwannoma is a benign, neurogenenic, slow-growing neoplasia, originated from Schwann cells, which are responsible by the myeline sheath on the peripheral nerves. This type of tumor is found more frequently on the central and peripheral nervous system and rarely occurs on the gastrointestinal tract

Schwannoma represents 0,2-1% of all gastrointestinal tract tumors, occuring more frequently on the stomach and rarely on colon and esophagus

The mean age of incidence is around 50-60 years old, with equal gender prevalence

It usually manifests itself by abdominal pain, prostration and dizziness with one week of evolution. She reported past history of diverticulitis and denied weight loss, hematoquezia or previous abdominal surgeries. During the physical examination, she complained of pain on deep upper abdominal palpation, although no abnormal mass could be detected. Proctologic examination and laboratory exams showed no abnormalities.

Abdominal ultrassonography showed a nodular solid heterogenic type image on the left flank, with 6.1x5.6x4.3 cm. Investigation with contrasted computed tomography detected an delimited intramuraeral lesion on the transverse colon, without invasion of surrounding organs (Figure 1).

Colonoscopy, with exploration until the cecum, showed not only sigmoidal diverticulosis, but also an intraluminal bulging on the topography of distal transverse colon, with adjacent normal aspect mucosa, suggesting extrinsic mass growth and lumen compression. Since the research for metastatic lesions was negative, extended left colectomy was performed, with resection of 18 cm intestinal segment, containing a 5.6x5.0x4.8 cm mass, located on the transverse colon, beside the splenic angle. The patient had a satisfactory evolution, leaving hospital on the 6th postoperative day.

CASE REPORT

The anatomopathologic analysis have highlighted a fusiform cell mesenchymal lesion, extending from colon submucosa until its subserous layer, with moderate cell nucleus atypia and two mitosis per 50 high-power fields, without evidence of hemorrhage or necrosis.

Immunohistochimical research showed positive results for kit gene products (C-kit/CD117) and for glial fibrillary acidic protein (GFAP) and S-100 protein. The results for hematopoietic cells antigen (CD34), desmine and smooth muscle actin (CD117) were negative. This profile was compatible with a gastrointestinal tract schwannoma diagnosis.

FIGURE 1 – Splenic angle mass: A) CT coronal slice; B) TC axial slice (distal transverse colon)

The initial evaluation is made by computed tomography or nuclear magnetic resonance (NMR) to determine location, size, density of the lesion and attempt to identify metastasis.

Colonoscopy usually shows unharmed mucosa and an insert image sugesting extrinsic compression of intestinal lumen. However, all mesenchymal tumors have similar colonoscopic image aspect, making it difficult to set an specific diagnosis. In addition, a colonoscopy guided biopsy is not always able to collect sufficient amount of tissue to ensure a correct diagnosis.

Thus, anatomopathological and immunohistochimical research of the surgically resected lesion is mandatory.

Therefore, in case of dealing with a resectable neoplasia, with high probability of mesenchymal tumor, surgical approach is indicated, with wide margin lesion resection, without necessity of lymphadenectomy, since the risk of metastasis in those cases is very low.

Considering the higher prevalence of GIST, the majority of schwannomas is misdiagnosed, until histological and immunohistochimical research and differentiation is concluded.

Schwannoma presents significant cell pleomorphism, lymphoid follicles, rare mitotic cells and rare necrotic spots. GIST shows high mitotic index, necrotic and hemorrhagic spots, without lymphoid follicles. Leiomyoma, on the other hand, does not show any of those characteristics. The most important immunohistochimical markers are CD117, CD34, S-100 protein, GFAP, SMA and desmine. Schwannoma is S-100- and GFAP-positive, but CD117- and SMA-negative. GIST is CD117- and CD34-positive, S-100- and GFAP-negative. Leiomyoma is CD117-, CD34-, S-100- e GFAP-negative. However, the latest is desmine- and SMA-positive, which are negative markers on schwannoma and GIST.
The most important mesenchymal tumors prognosis factors, specially for GIST, are tumor size and mitosis index. The less replicative and smaller is the neoplasia, the better is the prognosis. Radio and chemotherapy role in schwannoma remains uncertain; meanwhile, the recommended treatment is wide margin resection, without need of lymphadenectomy, mostly with excellent results

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**CASE REPORT**

Teenager of 16 year old was admitted with nails intake history during one year claiming attempt to self-extermination after constant arguments with his father and continuous nails intake. The parents were scavengers and had woodwork in which the patient had free access to the ingested material. Two days of admission he had epigastric pain, vomiting, and an episode of blackened stools. Physical examination showed good general condition, no Collaborative, palpable (1+ / 4+), emaciated, heart beat 105 bpm, blood pressure of 120x80 mmHg, flat and flacid abdomen, painful to deep palpation of epigastrum and no sudden pain to decompression. A large number of nails in the left iliac fossa was seen in abdominal radiograph (Figure 1); blood count was with leukocytosis and left shift.