CASE REPORTS

Gigantic jejunal leiomyosarcoma

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Gastrointestinal leiomyosarcomas are rare tumors. They arise most frequently from the ileum, the jejunum being the 2nd most common site of involvement. They are slow growing tumors that rarely metastasize. Ultrasound and computerized tomography guided biopsy are useful diagnostic techniques, and the best treatment is wide surgical excision with free margins. Adjuvant therapy is indicated for a selected group of patients. We have completely excised a huge jejunal leiomyosarcoma measuring 30 x 25 x 19 cm and weighing 13 kg.

Case Report. A 35-year old man presented with a slowly growing abdominal mass, which had been present for one year. It was associated with loss of weight, loss of appetite, constipation and dyspnea. There was no vomiting. Systemic review was unremarkable. On examination, the patient looked cachectic. There was no pallor, jaundice or lymphadenopathy. Abdominal examination revealed a huge pelvi-abdominal mass involving the whole abdomen. It was mildly tender on deep palpation and cystic in consistency. The rest of the examination was irrelevant. Basic laboratory investigations (Complete blood cell count, urea, creatinine, electrolytes, liver function tests, clotting profile, chest x-ray and abdominal x-ray) were within normal limits. Barium enema showed smooth, narrowed left colon, which was displaced medially and downwards. Intravenous urogram (IVU) was normal. Contrast computerized tomography (CT) scan of the abdomen and pelvis demonstrated a huge multi-septated cystic mass extending from the left hypochondrium to the pelvis (Figure 1). Fine needle aspiration cytology revealed suspicious cells. Laparotomy was carried out and showed a huge cystic mass measuring 30 x 25 x 19 cm filling the entire abdomen and displacing the left colon inferiorly. A loop of jejunum was adherent to the mass (Figure 2). There were no disseminated peritoneal or liver metastases. Dissection was facilitated by aspiration of 4 litres of dark red fluid. The whole mass was completely excised with excision of the adherent loop of jejunum. There was no residual disease. Intestinal continuity was restored by end-to-end jejuno-jejunostomy. The patient had an uneventful post-operative recovery. No adjuvant chemotherapy or radiotherapy was given. Histopathological examination revealed a spindle cell tumor extending from the musculosa to the serosa of the jejunum. There were hypercellular interlacing bundles of smooth muscle cells with ample esinophilic cytoplasm, large atypical nuclei with the presence of multinucleated giant cells. Mitosis was less than 5/10 high power field. These features are compatible with low-grade leiomyosarcoma of the jejunum weighing 13 kg, with free surgical margins (Figure 3).

Discussion. Leiomyosarcoma arise from malignant smooth muscle elements.

They are rare small intestinal tumors.1 Leiomyosarcomas are the most common intestinal sarcomas and represent 10-20% of all malignant tumors of the small bowel.2 They often exhibit protracted, slow growth and rarely metastasize.1 The symptoms of these tumors are variable and non-specific and depend on their size, location and histology. These include abdominal pain, abdominal distension, intestinal obstruction, gastrointestinal hemorrhage or even hemoperitoneum.2 The jejunum being the 2nd most common site of involvement after the ileum. Leiomyosarcomas usually grow in an intramural location with serosal extension and the neoplasms often become large masses that invade outside the intestine. They often develop ischemic necrotic centers as they frequently outgrow their vascular supplies. This can lead to fistula or abscess formation. Frequently their size is large with more than 75% being larger than 5 cm in diameter.3 Tomina

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References

1. Badzkor D. Leiomyosarcoma of the small intestine. Acta Chir Lugosl 1983; 30: 235-243.

2. Reina AJ, Fuentes O, Garcia A, Gonzalez C, Sanchez B, Lopez-Cantarero M et al. Intestinal leiomyosarcoma as the cause of severe haemoperitoneum. Dig Surg 1998; 15: 69-71.

3. Pagtalunan RJC, Mayo CW, Dockerty MB. Primary malignant tumours of the small intestine. Am J Surg 1964; 108: 13-18.

4. Tominaga J, Kawase S, Tsukawaki M, Araki N, Yoshida M, Tagami K et al. A leiomyosarcoma of the jejunum diagnosed by an ultrasonically guided percutaneous biopsy. Gan No Rinsho 1990; 36: 557-562.

5. Kakumu S, Aritake H, Katsuta K, Yatani R. Usefulness of ultrasonography-guided fine needle aspiration cytology in a case of jejunal leiomyosarcoma. Rinsho Byori 1989; 37: 948-953.

6. Fields S, Libson E. Computerized tomography-guided aspiration core needle biopsy of gastrointestinal wall lesions. J Comput Assist Tomogr 2000; 24: 224-228.

7. Brucher BL, Roder JD, Fink U, Stein HJ, Busch R, Siewert JR. Prognostic factors in resected primary small bowel tumors. Dig Surg 1998; 15: 42-51.

8. Conlon KC, Casper ES, Brennan MF. Primary gastrointestinal sarcomas: analysis

of prognostic variables. Ann Surg Oncol 1995; 2: 26-31.