A mass, originated from ileum.

Figure 1 A mass, originated from ileum.
1). Adjacent tissues were gently dissected by considering the risk of tumor rupture and tumor was resected with segmental ileum. After completion of the resection, specimen was removed from the abdomen with using Alexis Contained Extraction System (Figure 2), side to side ileo-ileal anastomosis was performed extracorporeally. Patient was discharged uneventfully on postoperative fourth day.

In histopathological examination, the tumor was diagnosed as GIST with size of 6.5 cm × 4.5 cm diameter (Figure 3).

Mitosis count was 3 per 50 high power fields (HPF). Immunohistochemically, the tumor cells were positive for CD 117 and CD34 and negative for, Desmin and S100 (Figures 4A-4C). With these findings (>5 cm. in size and 3 mitoses per 50 HPF) the tumor was categorized in high risk group.

Contrast-enhanced Computerized Tomography (CT) was performed postoperatively for staging, no other tumor and/or metastasis was observed, adjuvant imatinib therapy was started to patient on postoperative first month and during 13 months follow-up period, no recurrence was detected.
Gastrointestinal stromal tumors are fragile and capsular tumors, mitoses/50 HPF [7]. Metastasis was observed in tumors with <10 cm size and >5 mitosis per 50 HPF, on the other hand only 2% to 3% 86% metastasis in the group of tumors with >10cm tumor size [6], Miettinen et al. published (C-kit) is generally positive [3]. The prognosis of GIST is related derived growth factor receptor A (PDGFRA) gene and CD117 (KIT) is generally positive [3]. The prognosis of GIST is related with tumor size and mitotic activity [6], Miettinen et al. published their study in 2005, which included 1765 cases and they reported their study in 2005, which included 1765 cases and they reported 86% metastasis in the group of tumors with >10cm tumor size and >5 mitosis per 50 HPF, on the other hand only 2% to 3% metastasis was observed in tumors with <10 cm size and <5 mitoses/50 HPF [7]. Gastrointestinal stromal tumors are fragile and capsular tumors, gentle manipulation is recommended during surgery to avoid tumor rupture. Spontaneously or surgical tumor rupture is an independent negative risk factor for disease-free survival [8,9]. Segmental or wedge resection with negative margin is the preferred surgical approach. Routine lymphadenectomy is not recommended due to low potential of nodal metastasis [10]. KIT inhibition and surgery are the main treatment modality, Imatinib is a selective KIT protein tyrosine kinase inhibitor [11], neoadjuvant Imatinib can be used for down-sizing and down-staging for un-resectable GIST’s [12]. Laparoscopic surgery is a safe and reasonable option in GIST’s. Compared to open surgery, laparoscopic surgery has better results in gastric GIST’s [13-15], Although there are limited publications about laparoscopic treatment in small bowel GIST’s, minimal invasive surgery is much more recommended [16,17]. Laparoscopic surgery has advantages such as; less postoperative pain, shorter hospital stay, better cosmetic results, lower wound infection risk and faster return to normal bowel function, besides this advantages, if open surgery was preferred for our patient, tumor might get ruptured during McBurney incision. As a result of the preference of minimally invasive surgery, we could able to resect the tumor with intact capsule successfully by avoiding rupture, despite of the surrounding adhesions. For the GIST’s which are diagnosed peroperatively like in our case, surgical resection should be performed and tumor staging should be done during postoperative course.

Conclusion

In conclusion, patients with GIST may be presented with various clinical symptoms including acute abdomen, This case is presented to emphasize that the possibility of GIST should be kept in mind in the differential diagnosis of acute abdomen and to underline the advantages of laparoscopic resection for treatment of small bovel GIST’s.

References


