LETTER TO THE EDITOR

Mature Cystic Teratoma of the Greater Omentum Diagnosed as Intra-abdominal Tumor

A 58-year-old female patient, gravida 3 and para 3, visited the orthopedist for low back pain with right lower leg radiation. An intra-abdominal cystic tumor was found incidentally using spine magnetic resonance imaging. She was referred to the general surgery department for further evaluation.

The patient had no particular past history. She did not have any abdominal pain, gastrointestinal symptoms or changes in bowel habits. On physical examination, her height was 147 cm and her body weight 57 kg. Body temperature, pulse rate, respiratory rate, and blood pressure were within normal limits. She had normal heart and breathing sounds. The abdomen was flat, non-tender, and with normoactive bowel sounds. Abdominal and pelvic computed tomography revealed a fat-density well-demarcated mass with a discontinuous calcified wall that was 6.8 cm × 6.16 cm × 4.86 cm in size and abutting the appendix. The differential diagnosis was appendiceal mucocele or teratoma. The preoperative laboratory assessments for complete blood count, biochemical tests, and blood coagulation profiles were unremarkable except mild anemia. Her electrocardiogram and chest X-ray examination findings were normal.

At laparoscopy (Figure 1), the patient was found to have a whitish tumor, about 7 cm × 6 cm × 6 cm in size, located in the right lower quadrant of her abdomen, adhering to the greater omentum just near the appendix. The tumor was dissected carefully from the omentum and had a smooth outline. The tumor was then removed completely by endo-bag package and mini-laparotomy taking care to avoid rupture. Under laparoscopic inspection, the patient had a normal appendix, uterus, bilateral tubes, and ovaries. There was no macroscopically abnormal finding in the mesentery, omentum, small intestine, or colon, or on the liver surface. The procedure was performed without complications, and the patient withstood the procedure well.

The resected specimen was soft, ovoid in shape, light-reddish and 7 cm × 6 cm × 6 cm in size. A thin-walled cystic tumor was found to be filled with gray-yellowish sticky material and some hair shafts. The histopathological diagnosis was mature cystic teratoma of the greater omentum. Numerous hair shafts were seen on the inner surface, with some sebaceous glands and cartilages within the fibrous and degenerative wall. No immature or malignant component was seen. The patient had an uneventful postoperative course and was discharged on the 3rd postoperative day.

Teratoma is the most common germ cell tumor. It is defined as a tumor composed of various cells far from their original anatomic place. The cells can be either typical adult tissue or embryonic. In other words, it could consist of well-differentiated or immature cells. Teratomas occur most commonly in the ovary and can also arise from the testes, mediastinum, sacral region and the retroperitoneum. Teratomas have been reported to arise from peritoneal folds, such as the greater omentum, lesser omentum, or mesentery. In a review of greater omental teratoma, only one of the 28 reported cases was male, and was a 2-year-old boy. The others were women aged between 12 and 70 years. Two of the 28 cases had an immature cell component. Other reports show almost benign findings.

Omental teratoma is a rare disease which presents as an intra-abdominal tumor with or without any symptoms. Surgical excision and definite pathological diagnosis is the main of treatment of choice because of the risk of the presence of malignancy. The tumor should be dealt with cautiously, because of the catastrophic prognosis if the tumor disseminates into the peritoneal cavity.

References


Figure 1 Upper left and right pictures show that the tumor was attached and fed by omental vessels. In the left lower picture, the appendix (black arrows) was normal without association with the tumor. As shown in the right lower picture, the tumor was dissected completely.