Papillary serous cystadenocarcinoma of the stomach, peritoneum and ovary

Chih-Chien Yen^{1,2}, Chien-Sung Tsai¹, Sheng-Chuan Hsi¹, Ya-Sung Yang³

(1) Division of Cardiovascular Surgery, Department of Surgery, Armed Forces Tao-Yuan General Hospital, Taoyuan, Taiwan ; (2) Divisions of Cardiovascular Surgery, Department of Surgery, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan and ; (3) Department of Internal Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan and ; (3) Department of Internal Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan and ; (3) Department of Internal Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan.



Fig. 1. — CT images showing gastric antrum thickening (arrow) (A), heterogeneous intraperitoneal mass (arrow) (B), and pelvic mass (arrow) (C) with calcified psammoma bodies.

To the Editor :

A previous healthy 60-year-old woman presented to the hospital with an abdominal distention for two months. Physical examination revealed a fixed and nontender mass over right periumbilical region, measuring about 13 m in diameter. Her serum cancer antigen 125 (CA125) was 3188 U/mL. Computerized tomography (CT) of the abdomen and pelvis demonstrated thickening of wall of gastric antrum with air fluid level (Fig. 1A), huge intraperitoneal (Fig. 1B) and pelvic tumors (Fig. 1C) with heterogeneous calcified psammoma bodies. Sono-guided percutaneous biopsy of the peritoneum and endoscopic antral biopsy both revealed papillary serous cystadenocarcinoma. She refused to undergo debulking surgery. A combination chemotherapy with paclitaxel (Taxol[®]) + platinum (Cisplatin[®]) was initiated. After completing a course of chemotherapy (six cycles every 21 days), the tumor decreased in size. The followup of CA125 showed decreased level : 76 U/mL.

Papillary serous cystadenocarcinoma of the ovary and peritoneum is a well known tumor in postmenopausal women (1,2). An abdominal mass can be the only initial presentation in most patients. The most specific image presentation in CT is the heterogeneous mass with calcified psammoma bodies (3). The definitive treatment is initial maximal surgical cytoreduction followed by combination chemotherapy with paclitaxel-platinum. The overall prognosis is poor and a 5-year survival rate is between 15 to 20 percent (4-6). In postmenopausal women with an elevated CA125 and typical CT presentations, papillary serous cystadenocarcinoma should always be considered as a differential diagnosis.

References

- ALTARAS M.M., AVIRAM R., COHEN I., CORDOBA M., WEISS E., BEYTH Y. Primary peritoneal papillary serous adenocarcinoma : Clinical and management aspects. *Gynecol. Oncol.*, 1991, 40 : 230-236.
- STAFFORD-JOHNSON D.B., BREE R.L., FRANCIS I.R., KOROBKIN M. CT appearance of primary papillary serous carcinoma of the peritoneum. *Am. J. Roentgenol.*, 1998, **171**: 687-689.
- MITCHELL D.G., HILL M.C., HILL S., ZALOUDEK C. Serous carcinoma of the ovary : CT identification of metastatic calcified implants. *Radiology*, 1986, 158 : 649-652.
- MILLS S.E., ANDERSEN W.A., FECHNER R.E., AUSTIN M.B. Serous surface papillary carcinoma. A clinicopathologic study of 10 cases and comparison with stage iii-iv ovarian serous carcinoma. *Am. J. Surg. Pathol.*, 1988, **12**: 827-834.
- IAVAZZO C., VORGIAS G., KATSOULIS M., KALINOGLOU N., DERTIMAS V., AKRIVOS T. Primary peritoneal serous papillary carcinoma : Clinical and laboratory characteristics. *Arch. Gynecol. Obstet.*, 2008, 278 : 53-56.
- TAUS P., PETRU E., GUCER F., PICKEL H., LAHOUSEN M. Primary serous papillary carcinoma of the peritoneum : A report of 18 patients. *Eur. J. Gynaecol. Oncol.*, 1997, 18: 171-172.

Submission date : 08/07/2009 Acceptance date : 25/08/2009

Correspondence to : Ya-Sung Yang, Department of Internal Medicine, Tri-Service General Hospital, 325, Section 2, Cheng-Kung Road, Neihu 114, Taipei, Taiwan. E-mail : ysyoung4097@gmail.com