

CASE REPORT

Consequences of abdominal adenocarcinoma in post-menopausal woman in relation to surgical and non-surgical management

Moniruzzaman M¹, Faruquzzaman², Mohiuddin T³

Union Health Sub-centre, Barakpur, Khulna, Bangladesh. drfaruquzzaman@yahoo.com

Abstract: The umbilical tumor as a presenting symptom must be investigated for the possibility of metastasis. In this case, it was unlikely, as there was no primary carcinoma found elsewhere. Primary peritoneal carcinoma (also termed serous surface papillary carcinoma) is a malignancy that arises primarily from peritoneal cells. The mesothelium of the peritoneum and the germinal epithelium of the ovary arise from the same embryological origin. Although primary peritoneal carcinoma has a very poor prognosis, our patient had a disease-free interval of two years post surgery. Clinically, primary peritoneal carcinoma may be difficult to distinguish from ovarian carcinoma. Compared to ovarian carcinoma, primary peritoneal carcinoma has a higher rate of abdominal distension, volume of ascites, malignant cells in the ascitic fluid, lower rate of pelvic palpable mass, and personal breast cancer history. However, primary ovarian cancer can be excluded in this case, based on both ovaries being of normal size with no tumor involvement and a histology that favors serous carcinoma. The disease is normally disseminated throughout the peritoneum. Our patient's disease was confined to the umbilicus with no evidence of dissemination.

We report a rare case of adenocarcinoma confined to the umbilicus of a 64-year-old menopausal woman presented with an umbilical lump of nine years. After five years, she presented with a 6-cm irregular periumbilical mass. She agreed to undergo an excision biopsy of the mass with total abdominal hysterectomy and bilateral salpingo-oophorectomy with omentectomy. The excision biopsy showed adenocarcinoma with an appearance suggestive of metastasis from an ovarian cystadenocarcinoma. The frozen section of the tumor showed a papillary adenocarcinoma. Histology showed adenocarcinoma favoring serous cancer. It was found that tumor markers of ovarian malignancy were normal. There was no tumor seen in the ovaries, uterus and omentum. On follow-up, there was no disease recurrence. The patient has been disease-free for two years post surgery (Fig. 5, Ref. 10). Full Text in free PDF www.bmj.sk.

Key words: adenocarcinoma, umbilical tumor metastasis, primary peritoneal carcinoma and extraovarian primary serous carcinoma.

A 64-year-old, para 6+2, menopausal woman for twelve years presented with a lump at the umbilicus that was gradually enlarging for nine years. The lump was excised and histology showed there was an extensive invasion of the skin to the deep dermis by papillary adenocarcinoma with psammoma bodies.

The frozen section of the tumor showed a papillary adenocarcinoma. Histology showed adenocarcinoma favoring serous cancer. It was found that tumor markers for ovarian malignancy were normal. There was no tumor seen in the ovaries, uterus and omentum. The tumor extended focally into the superficial dermis but there was no ulceration. The small amount of mucin secretion by tumor cells was lower than in mucinous carcinoma (Figs 1, 2).

¹Chittagong Medical College Hospital, Chittagong, Bangladesh, ²Union Health Sub-centre, Barakpur, Khulna, Bangladesh, and ³Sher-e-Bangla Medical College Hospital, Barisal, Bangladesh

Address for correspondence: Faruquzzaman, MD, C/O: Md. Moazzem Hossain (Engineer), House No. 7, Islambag Road (Paulpara), Railygate, Daulatpur (Postal code 9202), Bangladesh.
Phone: + 8801713312349

Computed tomography (CT) showed a midline incisional hernia in the umbilical region. The appearance suggested a metastasis from an ovarian cystadenocarcinoma. Immunohistochemistry indicated reactivity for CK 7 and non-reactivity for CK 20, consistent with serous carcinoma of the ovary. CEA was 4.5 µg/L, CA 125 was 15.9 U/ml, AFP was 5.1 µg/L, and Pap smear was normal. She was advised to undergo further surgery to ascertain the primary source of the disease. She defaulted on follow-up for five years. There was no evidence of an ovarian tumor.

After 5 years, she presented with a lump over the umbilicus again, discharging pus and blood. There was a 6-cm irregular fleshy periumbilical mass with ulceration and rolled edges. Her CEA was 3.2 µg/L, βHCG was 2.5 µg/L, CA 125 was 39.1 U/ml and AFP was 4.0 µg/L. The CT of her abdomen and pelvis showed a large periumbilical hernia with thickening of the right periumbilical skin and an area of calcification within. She underwent a laparotomy and total abdominal hysterectomy, bilateral salpingo-oophorectomy and infragastric omentectomy. Intraoperatively, there was an ulcerative cancer around the umbilicus with a mid-

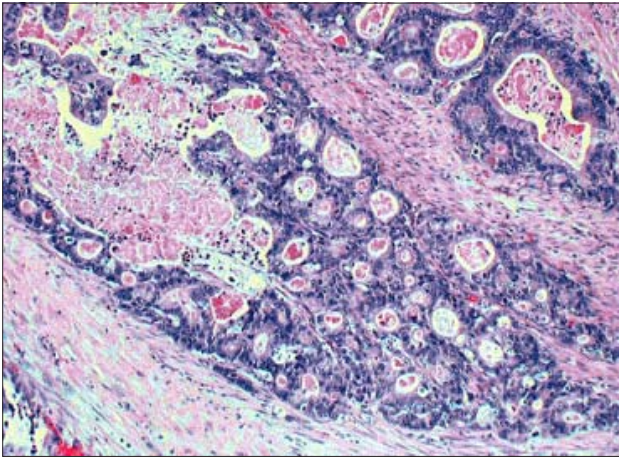


Fig. 1. Histology of adenocarcinoms.

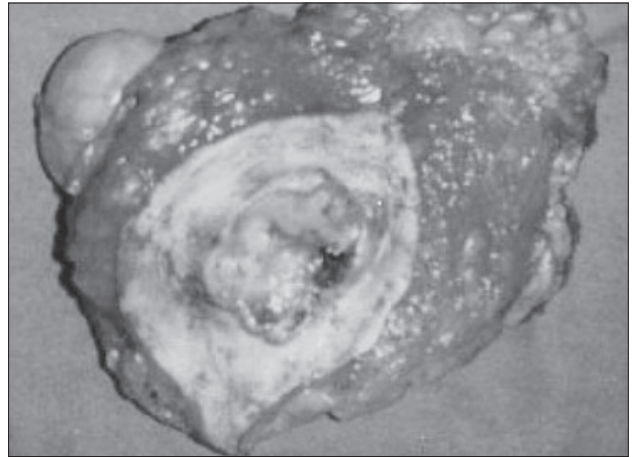


Fig. 3. Umbilical wall tumour.

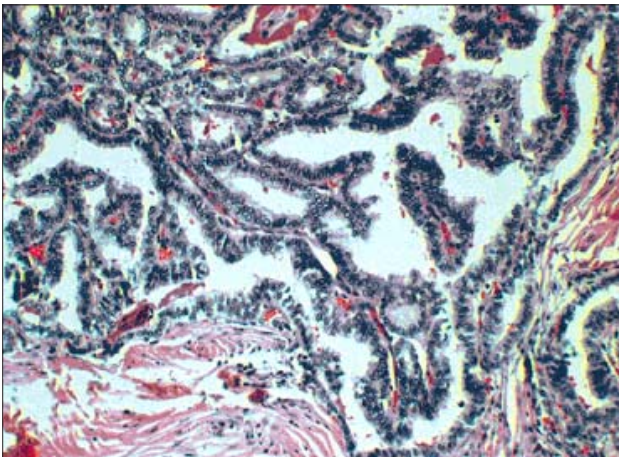


Fig. 2. Papillary adenocarcinoma. The tumor exhibits numerous fronds lined by malignant epithelial cells.

line incisional hernia. It was resected with wide margins en bloc from the skin to the peritoneum (Figs. 3, 4, 5).

Discussion

The loss of R point control deregulates progression through the cell cycle and plays a significance role. Cancer cells often display the loss of R point control through mechanisms such as (a) amplification/overexpression of cyclins/CDKs, (b) loss of CKIs, and (c) mutational inactivation of pRb or p53 proteins. For example, decreased levels of the CKI P27 are associated with a poor prognosis in adenocarcinoma.(1)

75 % of malignant umbilical tumors correspond to a Sister Joseph's nodule.(2) The mesothelium of the peritoneum and the germinal epithelium of the ovary arise from the same embryological origin; therefore, the peritoneum may retain the multipotentiality of the müllerian system, allowing the development of a primary carcinoma(3). The average age at diagnosis is 57.4 years (4). Clinically, primary peritoneal carcinoma may be difficult to distinguish from ovarian carcinoma. Compared to ova-



Fig. 4. Resected uterus, fallopian tubes, ovaries and omentum.

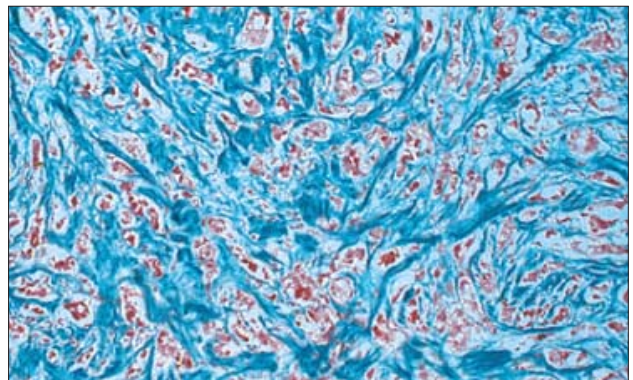


Fig. 5. Scirrhus adenocarcinoma.

rian carcinoma, primary peritoneal carcinoma has a higher rate of abdominal distension, volume of ascites, malignant cells in the ascitic fluid, lower rate of pelvic palpable mass, and personal breast cancer history (5, 6). 33 % of patients have macroscopical uterine involvement (6, 7). Treatment is the same as for ovarian carcinoma. The best chance for survival is cytoreductive surgery, followed by adjuvant chemotherapy (6, 8, 9, 10) The median overall survival period is 23.5 months (6, 8).

References

1. **Rubin, Raphael; Strayer, David S.** Rubin's Pathology: Clinicopathologic Foundations of Medicine, 5th Edition; 2008: 138–142.
2. **Poncelet C, Bouret JM, Boulay I et al.** Umbilical metastasis of an endometrial adenocarcinoma: "Sister (Mary) Joseph's nodule". Review of the literature. *J Gynaecol Obstet Biol Reprod (Paris)* 1996; 25: 799–803.
3. **Bleibel W, Kozyreva O, May SK et al.** Peritoneal cancer. In: eMedicine [online]. Available at: www.emedicine.com/med/topic1795.htm. Accessed July 23, 2007.
4. **Fromm GL, Gershenson DM, Silva EG.** Papillary serous carcinoma of the peritoneum. *Obstet Gynecol* 1990; 75: 89–95.
5. **Barda G, Menczer J, Chetrit A et al.** MPH and for the National Israel Ovarian Cancer Group. Comparison between primary peritoneal and epithelial ovarian carcinoma: a population-based study. *Am J Obstet Gynecol* 2004; 190: 1039–1045.
6. **Wong WL, Tay EH.** Adenocarcinoma of the abdominal wall: Singapore Med J 2008; 49 (12) : e359.
7. **Menczer J, Chetrit A, Barda G et al.** Primary peritoneal carcinoma – uterine involvement and hysterectomy. *Gynecol Oncol* 2006; 100: 565–569.
8. **Ransom DT, Patel SR, Keeney GL, Malkasian GD, Edmonson JH.** Papillary serous carcinoma of the peritoneum. A review of 33 cases treated with platin-based chemotherapy. *Cancer* 1990; 66: 1091–1094.
9. **Zhou J, Iwasa Y, Konishi I et al.** Papillary serous carcinoma of the peritoneum in women. A clinicopathologic and immunohistochemical study. *Cancer* 1995; 76: 429–436.
10. **Eltabbakh GH, Werness BA, Piver S, Blumenson LE.** Prognostic factors in extraovarian primary peritoneal carcinoma. *Gynecol Oncol* 1998; 71: 230–239

Received March 24, 2009.

Accepted April 4, 2011.