THE JOURNAL OF OBSTETRICS AND GYNECOLOGY OF INDIA

The Journal of Obstetrics and Gynecology of India (September–October 2014) 64(5):366–367
DOI 10.1007/s13224-012-0234-9

CASE REPORT

Krukenberg Tumor Secondary to an Incidentally Discovered Gall Bladder Carcinoma: A Rare Occurrence

Gayathri K. B. · Subhashri M. · Vijaya Sree M. · Kumar C. H. V. P.

Received: 15 September 2011 / Accepted: 14 June 2012 / Published online: 27 September 2012

Introduction

Bilateral ovarian tumors may be primary or secondary to Krukenberg's tumors (KT). KT are usually caused by gastrointestinal primaries or breast cancer [1]. In this article, we present an interesting case of KT secondary to gall bladder cancer.

Case Report

A 35-year-old lady presented with abdominal lump in abdomen for the past 2 months. There was no history of hematemesis, altered bowel habits, or jaundice. On examination, two large separate bilateral lumps were palpable. Computerized tomogram (CT) of abdomen revealed two large heterodense masses one from each ovary (Fig. 1a) and an incidental soft tissue lesion in fundus of the gall bladder, which was considered as a gall bladder polyp (Fig. 1b). Upper GI endoscopy ruled out stomach lesions. Breast examination was normal. Our provisional diagnosis was bilateral ovarian mucinous cystadenoma. We searched for a gastrointestinal primary, but failed in detecting one. We proceeded with exploratory laparotomy. A polycystic mass of size 20 × 20 × 16 cm firm, was seen arising from right ovary and a mass of size 18 × 15 × 14 cm from left ovary. We performed total hysterectomy and bilateral oophorectomy along with tumor excision (Fig. 2). We also performed cholecystectomy (Fig. 3), infracolic omentectomy, and selective pelvic lymphadenectomy.

Histopathological examination was a surprise, as it proved to be mucinous adenocarcinoma of gall bladder, and both ovarian masses were polycystic secondaries from gall bladder. Forty percent omental lymph nodes were positive for secondaries. Patient is asymptomatic with no local recurrence at 4 months of follow up.

Discussion

Incidence of bilateral ovarian metastases from a distant primary is 5–15 % [2]. The etio-pathogenesis of Krukenberg's tumor of ovaries is debatable. The classical theory of transcoelomic spread is challenged by recent phenomenon of retrograde lymphatic spread. The common primaries causing these tumors are gastric, colonic, and breast cancers [1]. Rarely, gall bladder cancers have been reported to cause KT. However, majority of these cancers are advanced and carry poor prognosis [3]. In our case, the gall bladder lesion was relatively occult to such an extent

Gayathri K. B. (✉), Assistant Professor · Subhashri M., Assistant Professor · Vijaya Sree M., Professor
Gynaecology and Obstetrics, Mamata Medical College/Mamata General Hospital (MMC/MGH), Rotary Nagar, Khammam, Andhra Pradesh 507002, India
e-mail: dr.gayathri.bhargav@gmail.com

Kumar C. H. V. P., Assistant Professor
General Surgery, Mamata Medical College/Mamata General Hospital (MMC/MGH), Rotary Nagar, Khammam, Andhra Pradesh 507002, India

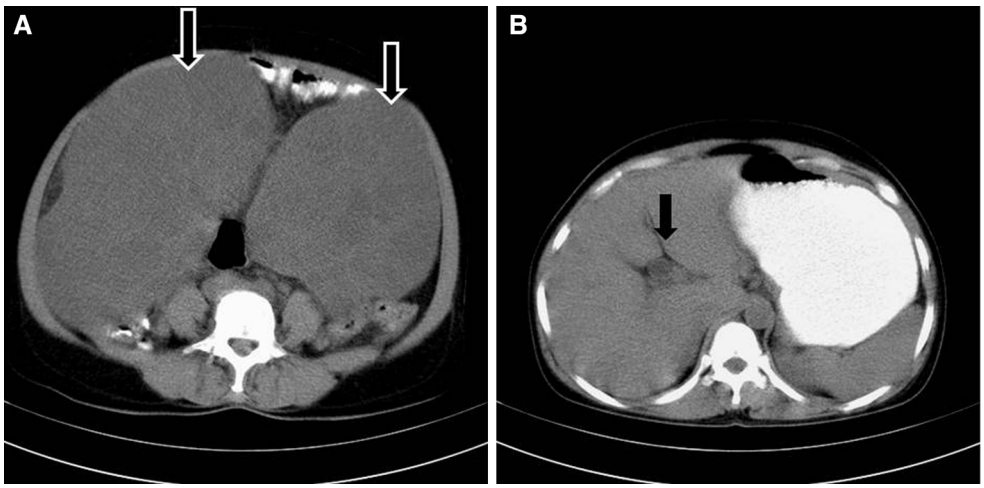

Fig. 1 **a** Computerized tomogram (CT) of abdomen showing two large heterodense masses (*arrows*) arising from ovaries; **b** CT showing a hypoechoic space occupying lesion in gall bladder (arrow)

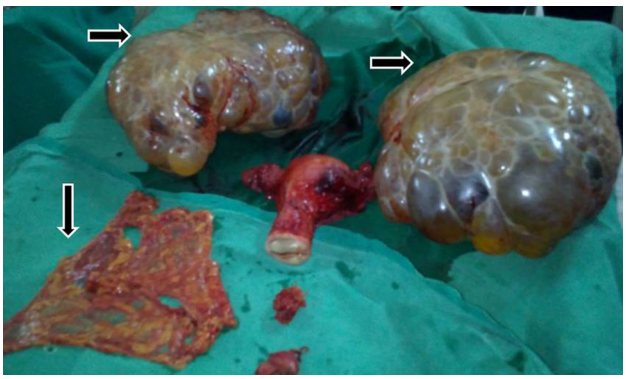

Fig. 2 Ex vivo specimen of hysterectomy, ovarian masses, and greater omentum (*vertical arrow*)

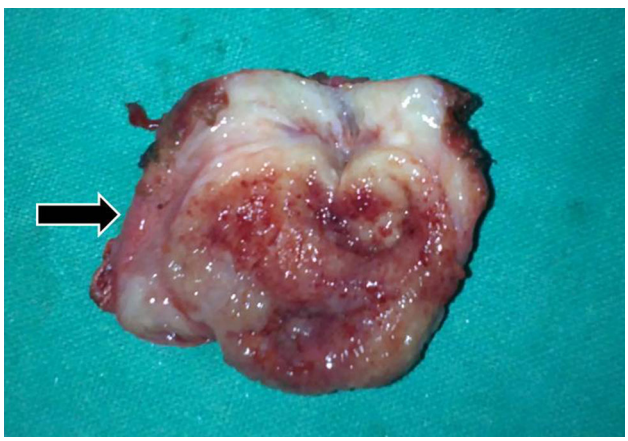

Fig. 3 Cut section of cholecystectomy specimen showing 2 × 2 cm papilliferous vascular lesion (*arrow*)

that both radiological and intraoperative examination prevented us from thinking about gall bladder carcinoma as the primary pathology. Fortunately, the patient received adequate and definitive surgery, in spite of provisional diagnosis of primary ovarian mucinous cystadenoma. The prognosis of gall bladder carcinoma with KT is not favorable in many cases [3]. Nevertheless, cholecystectomy for gall bladder cancer with KT gives significant palliation from potential jaundice, gastric outlet obstruction, and cachexia.

We suggest that, in the presence of bilateral ovarian tumors, we proceed as follows: (1) KT must be suspected. (2) Thorough search for primary (gastrointestinal, colon, breast and gall bladder) site must be done. (3) Any gastrointestinal mass lesion should be viewed and treated with high index of suspicion, as primary carcinoma can present in subtle manner as in this case.

Conflict of interest There are no conflicts of interest amongst the authors regarding the content of article and clinical work of this case. None of us are involved in any financial interest or a company.

References

1. Kiyokawa T, Young RH, Scully RE. Krukenberg tumors of the ovary: a clinicopathologic analysis of 120 cases with emphasis on their variable pathologic manifestations. Am J Surg Pathol. 2006;30(3):277–99.
2. Jarvi K, Kelty CJ, Thomas WE, et al. Bilateral ovarian metastases from carcinoma of the gallbladder. Gynecol Oncol. 2006;103:361–2.
3. Chicos SC, Beznea A, Chebac GR, et al. The Krukenberg tumor caused by an adenocarcinoma of the gallbladder. Chirurgia (Bucur). 2007;102(4):481–5.