CASE REPORTS

GALL BLADDER CARCINOMA WITH KRUKENBURG TUMOUR: A CASE REPORT

Maqbool Ahmad, Nasir Mahmood Wattu, Shaukat Mahmood Qureshi, Asma Azhar, Muhammad Atique

Combined Military Hospital Multan

INTRODUCTION

Carcinoma gall bladder is the most common cancer of the biliary tract. Females are affected three times more often than males, with average age of 65 years. Gall stones are present in 75 to 90% of cases [1].

They remain asymptomatic and are discovered incidentally during or after cholecystectomy or present with non specific symptoms like upper abdominal pain, nausea vomiting weight loss, jaundice or gall bladder mass. The majority of patients have advanced disease at the time of presentation which carries a poor prognosis [2-4].

The modes of spread of gall bladder carcinoma are direct, lymphatic, vascular, neural, intraperitoneal and intraductal. Ultra Sound, CT and MRI are helpful in diagnosis and staging of the disease. Surgery remains the mainstay of treatment and chemotherapy has a very limited role. We present an unusual case of gall bladder carcinoma metastasizing to both the ovaries.

CASE REPORT

A 50 year old lady was admitted in gynaecological ward of Combined Military Hospital Multan with history of irregular vaginal bleed for the last eight months. This was associated with occasional low grade fever, lower abdominal pain, anorexia and weight loss. The general physical examination was unremarkable except for mild tenderness at the lower abdomen. The vaginal examination also did not reveal any abnormality. The ultrasound of the pelvis revealed complex ovarian mass of mixed echogenicity involving both the ovaries and ultrasound of upper abdomen was suspicious of growth involving the gall bladder. CT of abdomen and pelvis revealed malignant growth of gall bladder and bilateral ovarian growths involving the gut (Fig. 1, 2). All other investigations including chest X-ray were within normal limits. The laparotomy revealed constricting growth involving fundus of gall bladder, bilateral ovarian masses and peritoneal seedlings involving the right dome of diaphragm and pouch of douglas. She underwent cholecystectomy with a cuff of liver tissue, bilateral oophorectomy and hysterectomy. The histopathology revealed well differntiated adenocarcinoma of gall bladder with bilateral Krukenburg tumour (Fig. 3). Serological tumour marker for ovarian carcinoma, cancer associated antigen 125 (CA 125) was slightly raised. Immunohistochemical evaluation of cytokeratin 20 (CK 20) was positive (Fig. 4). She is undergoing chemotherapy at a local Centre.

DISCUSSION

Gall bladder tumours spread directly to liver, involving segment IV & V mostly, occasionally to duodenum and colon, via lymphatics to pancreatodoudenal, coeliac, porta hepatis and para aortic lymph nodes, via blood to distant sites, intraductally to extrahepatic biliary tracts and ocassionally transperitonealy resulting in peritoneal seedling . In the era of laparoscopic cholecystectomy port site and intraperitoneal dissemination is increasingly being encountered [5, 6]. Liver and lymph nodes are the two most common sites of metastasis of gall bladder carcinoma [7, 8].

Krukenberg tumour is metastatic signet ring cell adenocarcinoma of the ovary

Correspondence: Brig Maqbool Ahmed, Classified Surgeon, Combined Military Hospital Multan

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accounting for 1-2% of ovarian neoplasms. Stomach is the primary site in the majority of Krukenberg tumours (70%) [9]. Carcinoma of colon, appendix, breast (invasive lobular carcinoma) are next most frequent sites. Extremely rare cases of tumour originating from, in the biliary tract, pancreas, cervix and urinary bladder have been reported [10].

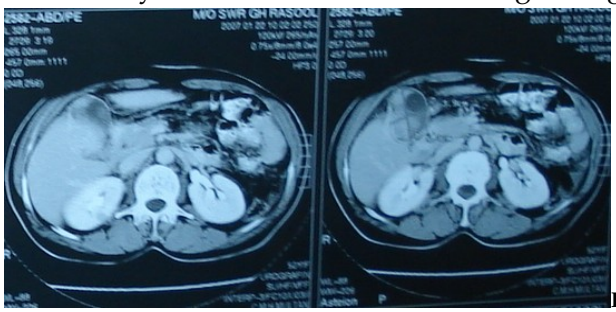

Fig.1: CT Scan showing Carcinoma of Gall Bladder

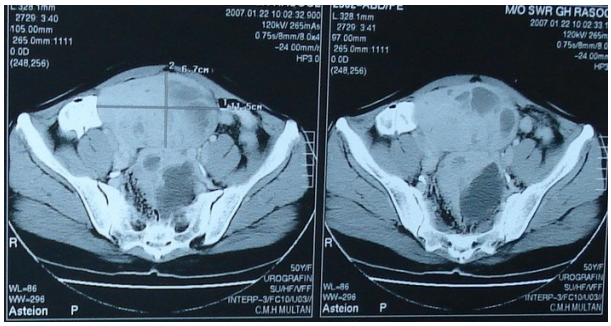

Fig. 2: CT Scan Pelvis Showing Krukenberg Tumour

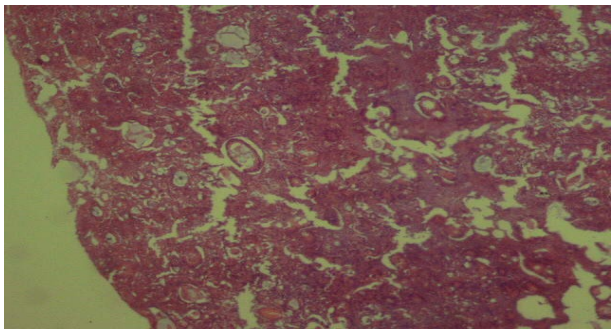

Fig. 3: Photomicrograph of Ovary Showing Krukenberg Tumour (H E x 100)

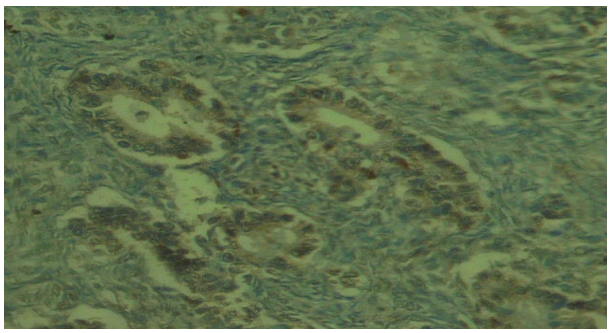

Fig. 4: Immunohistochemistry ck 20 Positive. Krukenburg

Metastasis of gall bladder tumours to the ovaries is extremely rare. Very few cases have been encountered so far [11, 12]. The route of spread to ovaries, without involving the other tissues, has been a mystery for a long time. Now it has been proved that retrograde lymphatic spread is the most likely route of ovarian melastasis [13]. Even though Krukenberg tumours are in the ovary, the treatment, which is usually chemotherapy, will depend on the site of the primary cancer and the prognosis remains poor.

CONCLUSION

Although extremely rare, a possibility of a primary tumor in the gall bladder should also be kept in mind when dealing with the krukenberg tumour in the absence of primary in the stomach.

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