

Gastric Tumeur Revealed By Krukenberg's Ovarian Tumeur: About 2 Cases

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Abstract: *Krukenberg's tumour is a solid, ovoid, kidney-shaped or nodular malignant tumour of the ovary, often bilateral, characterised by the presence of 'signet' or 'ring' cells(1). In 80% of cases, they are metastases of a digestive, pyloric or gastric cancer, and in 20% of cases they are primary(1). Over a period of years, between January 2019 and January 2025, we collected 2 cases of Krukenberg tumours treated in the HASSAN II obstetrics and gynaecology department in Fez. By analysing this series and comparing the results with the literature, the authors highlight the rare nature of this tumour. The importance of histological diagnosis is emphasised, and the prognosis remains poor despite radical surgical treatment combined with adjuvant therapy.*

Keywords: Krukenberg cancer, ovarian metastasis, prognosis

Observations :

Clinical case 1:

A 49 year old patient, mother of two children, delivery by caesarean section, menopausal for 3 years, consulted for abdominal pain, generalized asthenia and progressive pelvic distension. The examination revealed moderate ascites with a normal-sized anteverted uterus with two bilateral adnexal masses, the largest measuring 90 mm.

and the abdominal scan revealed bilateral ovarian masses in contact with the ileal ansae and the rectum without a separation line with moderate intraperitoneal effusion.

Laparotomy for hysterectomy with bilateral adnexectomy.

Pathology confirmed ovarian location of a kitten-ring cell carcinoma.

Gastric endoscopy, performed after the ovarian masses had been identified, showed an underlying gastric carcinoma, confirming the diagnosis of ovarian metastasis.

Clinical case 2 :

A 48 year old patient, mother of 3 children, menopausal for 5 years.

presented with persistent digestive problems for six months, with vomiting and epigastralgia. The evolution was marked by abdomino-pelvic pain, accompanied by weight loss and abdominal distension, with two hard bilateral latero-uterine masses on vaginal examination.

the CT scan showed a pyloric thickening with two bilateral ovarian masses, the largest of which was 10 cm long with no relationship with the neighbouring organs

Biological tests showed anaemia of 6 g/l, and the patient underwent transfusion of 2 packed red blood cells, followed by total hysterectomy with bilateral adnexectomy.

The diagnosis of Krukenberg's tumour was confirmed after biopsy and gastrointestinal exploration, which revealed gastric cancer located in the pylorus.

Introduction

Krükenberg's tumour is a rare tumour of the ovary. It accounts for 1 to 2% of malignant tumours of the ovary; in most cases, it is secondary to a mucosecretory digestive cancer in over 90% of cases (2).

It is often due to gastric cancer, although other cancers, such as colon or breast cancer, may also be the cause. It is characterised by the presence of signet-ring tumour cells, typical of gastric carcinomas. The condition affects young women, with an average age of 40.

This is consistent with our study, in which the mean age was 48.5 years.

These metastases are often asymptomatic and may be discovered incidentally during pelvic ultrasound, abdominal CT scan or exploratory laparotomy.

Clinical symptoms :

Symptoms of Krukenberg's ovarian tumour are often non-specific and may include:

- Abdominal pain: Pelvic discomfort or pain may be present due to ovarian tumour growth.
- Abdominal distension: if ascites is present.
- Digestive disorders: These may be related to the primary gastric tumour, with symptoms such as epigastric pain, nausea or vomiting.
- Weight loss and asthenia may also be observed, due to advanced disease.

The tumour is often discovered per-operatively; the diagnosis of Krukenberg's ovarian tumour is based primarily on the identification of the histopathological characteristics of the tumour cells. Signet-ring cells, characteristic of gastric cancer, are observed during ovarian biopsy. Confirmation of primary gastric cancer is obtained by :

- Gastrointestinal endoscopy: used to visualise the gastric lesion.
- Computed tomography (CT scan): Used to locate ovarian masses and assess the extent of the cancer.
- Gastric biopsy: confirms the malignant nature of the gastric lesion.

In 80% of cases, the ovarian tumours are bilateral, bulky with a smooth, bumpy surface; characteristically, there are no adhesions with neighbouring organs (3), which is in contrast to our two cases where the ovarian masses were free.

The differential diagnosis includes other types of ovarian metastases, particularly those arising from breast or colon cancers.

Treatment of ovarian Krukenberg tumours depends on the stage of the primary tumour and the extent of metastases. In all cases, multidisciplinary treatment is required, including :

- Surgery: Ovarian masses are often surgically removed to relieve symptoms and improve quality of life.

However, ovarian surgery is not a cure for multiple metastases.

- Chemotherapy: Treatment of the underlying gastric cancer is essential. Adjuvant chemotherapy is commonly used after surgical removal of gastric cancer.
- Radiotherapy: Although rarely used, it may be considered in some cases to control localised tumour growth.

The prognosis of ovarian Krukenberg tumours is generally guarded, as the discovery of ovarian metastasis often occurs at an advanced stage of gastric disease. The prognosis depends on a number of factors, including

- The extent of the primary gastric cancer.
- Response to treatment.
- The patient's general condition.

The five-year survival rate is relatively low, as most patients have advanced disease at the time of diagnosis.

Conclusion

Krukenberg ovarian tumours present a major diagnostic challenge due to their low frequency and often non-specific symptoms. Their discovery may be indicative of an underlying gastric cancer. Prompt, multidisciplinary management, combining surgery, chemotherapy and rigorous follow-up, is essential to improve patients' survival prospects and quality of life. Early identification and appropriate treatment of primary gastric cancer remain crucial to the management of these complex cases.

Références

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