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Primary Bilateral Adenocarcinoma of the Fallopian Tube: A Case Report

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Abstract

Primary fallopian tube carcinoma is an uncommon malignancy that accounts for 0.14% to 1.8% of gynecological cancers. The clinical symptom is not specific and preoperative diagnosis is easy to miss or delay because of a lack of specific symptoms. We reported a case of bilateral adenocarcinoma of the Fallopian tubes, was occurred in a 51-year-old postmenopausal woman and diagnosed with bilateral salpingectomy for suspicious of suppurative salpingitis. The diagnosis is not always suspected preoperatively. They are assimilated to salpingitis in the early stage, or to ovarian tumors in the advanced stage. The diagnosis is made postoperatively, after an anatomopathological examination. Its etiology is still poorly understood.

Keywords

Adenocarcinoma, Fallopian Tube, Madagascar, Tubal Carcinoma

1. Introduction

Fallopian tube cancers are rare. Primary fallopian tube carcinoma accounts 0.14% to 1.8% of gynecological cancers [1] [2]. Bilateral tubal cancers are very exceptional. The few studies in the literature concerning this cancer are only case reports. They may be associated with hereditary breast and ovarian cancer syndrome, with involvement of BRCA1 and BRCA2 gene mutation [3].

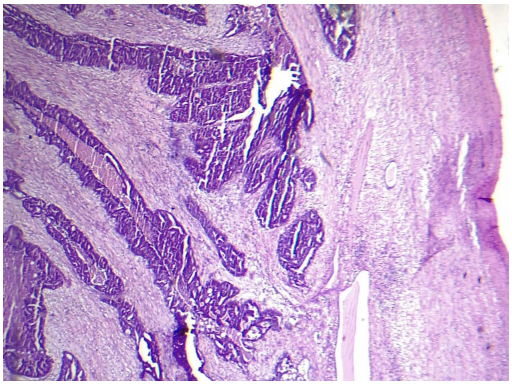
We reported a case of tubal adenocarcinoma with bilateral location. Clinical features suspected bilateral suppurative salpingitis.

2. Observation

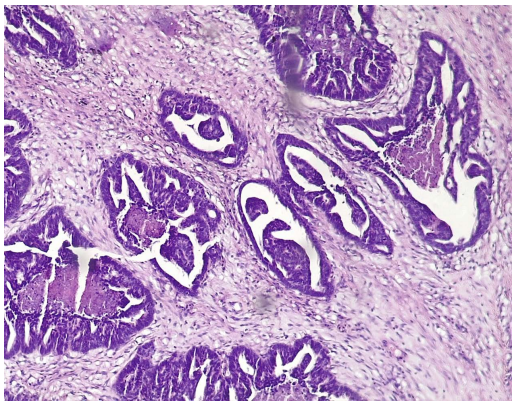
We reported the case of a 51-year-old postmenopausal woman. She had chronic abdominal pain which was started 5 years ago, with a variable intensity. This

pain became continuous and increased in intensity, hence she was admitted to the gynecology department. The patient had no particular medical or surgical history. The physical examination showed a sensitive abdomen. Vaginal examination is limited by local pain with yellowish-white discharge. The biological examination showed a moderate inflammatory syndrome. The pap smear was very inflammatory, without neoplastic cells. Ultrasound showed two enlarged fallopian tubes, containing purulent secretions. The ovary and uterus were normal. The diagnosis of bilateral suppurative salpingitis was made, and a bilateral salpingectomy was performed. On gross findings, respectively the fallopian tubes specimen's diameters were 10.3 × 4.4 cm and 11.4 × 5.4 cm. The serosa was smooth, without perforation. The section showed that they contained beige and sometimes gelatinous, yellowish-green solid substances.

On histological examination, both fallopian tubes presented the same lesion. The mucosa was extensively ulcerated. The tubal wall was infiltrated by a tumoral proliferation, composed of cells with moderate to severe cytonuclear atypia, organized in cribriform clusters or with glandular formation (Figure 1). They infiltrated the wall without reaching the serosa. The background contained important polymorphic inflammatory cells.



(a)



(b)

Figure 1. Tubal adenocarcinoma, with proliferation tumor organized in cribriform clusters or with glandular formation HE ×100 (a) ×200 (b). Source: Pathology of department, Joseph Ravoahangy Andrianavalona hospital, Antananarivo, Madagascar.

The diagnosis was a tubal serous adenocarcinoma, stage IB according to FIGO, associated with bilateral salpingitis.

An exploration of the ovaries and the endometrium was performed to eliminate tubal metastases of an ovarian or endometrial primitive tumor, but appeared negative.

The patient was treated in the Oncology Department and regular follow-up was performed.

3. Discussion

Primary fallopian tube cancer is rare. The first description was made by Renand in 1897 [4]. Our case would be the first Malagasy case described and published.

The bilaterality of the lesion is exceptional. As in our case, Prajna H *et al.* [5], Kasse A *et al.* [6] reported bilateral cases. A series of 36 cases of tubal cancer reported by Ying Ma mentioned 3 bilateral cases [7].

The etiology is still unknown, but certain situations, such as multiparity, pregnancy, oral contraceptives, decrease the risk [8] [9]. It may also be associated with hereditary breast and ovarian cancer syndrome, with the mutation of the BRCA1 and BRCA2 genes [3].

Our patient was 51 years old. Those of Prajna H *et al.* [5] and Rexhepi *et al.* [10] were 55 and 62 years old respectively. The one reported by Honda *et al.* was 47 [11]. Primary fallopian tube cancer often affects older postmenopausal women. The age ranges between 17 and 88 years, with a peak between 60 to 64 years, and an average age of 55 years [12].

The clinical symptomatology is nonspecific, and includes abdominal pain, metrorrhagia, and pelvic mass [13] [14]. In our case, the clinical feature was a progressive chronic abdominal pain. This symptom was also observed in the cases reported by Prajna H *et al.* [5], Rexhepi M *et al.* [10], and Honda T *et al.* [11].

Ultrasound is nonspecific. The fallopian tube adenocarcinoma mimic other pelvic pathologies, such as ovarian tumors, tubo-ovarian abscesses [15] [16]. In our case, bilateral abscessed salpingitis was suspected.

The patient's pap smear was negative for malignancy. This examination can sometimes detect the tumour, as in the study by Honda T *et al.* [11], but it is often negative [10] [17] [18]. In effect, the preoperative diagnosis rate of primary fallopian tube cancer is low, around 0 to 10% [19].

The diagnosis is based on criteria that were proposed by Hu *et al.* [20] and revised by Sedlis [21] [22] then by Folkins AK [23]. These criteria are: the main tumor is in the fallopian tube; histology reproduces the tubal epithelium; the benign-malignant transition of the epithelium is demonstrated; the absence of tumor either in the ovary or in the uterus, or, if applicable, a tumor of a histological type different from those of the uterus and/or the ovary. Hence the anatomopathological examination is important for the diagnosis.

Gross examination shows tubal dilatation with the presence of a mass ob-

structing the lumen and some parietal thickening. This lesion corresponds to the classic appearance of a hydrosalpinx [24], or a pyosalpynx or an abscess [25]. On section, the lesion appears as a solid intraluminal mass of papillary appearance with hemorrhagic areas and areas of necrosis in a dilated fallopian tube with a thickened wall [25].

On histological examination, the tumor cells organization in our case was solid, cribriform and tubular. While in the literature, it is the papillary architecture which is most often observed [26] and the most frequent histological type is the serous type (49.5% to 83%) [27], it was the case of our patient. Then, the endometrioid type comes to the second place (8% to 50% of cases), and mixed, undifferentiated, clear cell, transitional and mucinous types [27].

Unlike ovarian carcinoma, primary fallopian tube adenocarcinoma is often diagnosed at an early stage [28], as in our patient where the diagnosis was made at the stage IB. This is related to the precocity of symptoms linked to the distension of the tubal wall causing abdominal pain [28].

4. Conclusion

Primary fallopian tube adenocarcinoma is rare. The characteristics of our case were similar to those reported in the literature. Our study was characterized by its bilateral location this case is exceptional, and was diagnosed in early stage. Due to this rarely and the non-specific symptom, the tumor is not often suspected preoperatively. The anatomopathological examination after the surgery allows the diagnosis.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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