

# Primary Fallopian Tube Cancer: Case Report And Literature Review

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**Abstract:** Fallopian tube cancer is rare and most often affects postmenopausal women. It is often an adenocarcinoma. The symptomatology is usually vague and includes an adnexal mass or vague abdominal and pelvic symptoms. Its presumptive diagnosis is radiological and based on pelvic ultrasound and MRI, but often it is done intraoperatively. Because of its proximity to the ovary, the clinical similarity pathophysiological and histological, its management is similar to that of the ovary, and based on surgery and chemotherapy.

**Keywords:** Fallopian tube cancer; diagnosis; management.

## 1. Introduction

Fallopian tube cancer is a very rare cancer, it occurs mainly in postmenopausal patients, and constitutes with ovarian cancer and peritoneal cancer a clinical and therapeutic entity with several similarities in terms of management.

This cancer develops preferentially on the distal end of the tube, and this location explains the clinical symptoms which often lead patients to consult a doctor: pain of the heavy type, bleeding, and hydorrhea.

The diagnosis is rarely made preoperatively because of its clinical and radiological similarities with ovarian cancer. It is based on pelvic ultrasound, which is the reference examination for all pelvic pathologies, and CA 125 measurement is a classic for any suspected ovarian pathology, which constitutes the first differential diagnosis.

The management is almost identical to serous ovarian tumors and is based on surgery associated with chemotherapy.

The prognosis of these tumors is partially better than that of ovarian cancers since their symptomatology is more noisy and depends on the stage of the disease, the age, the histological type, and the quality of the initial surgery.

We report in our observation the case of a patient with a primary cancer of the fallopian tube discovered intraoperatively, initially programmed for a neo of the ovary.

## 2. Medical observation

This is a single, postmenopausal patient, aged 12 years, without children, who was consulted for hydorrhea complicated by chronic pelvic pain, without any cycle disorder or other associated sign.

The clinical examination found a patient in good general condition, hemodynamically and respiratorily stable, abdominal palpation found an abdomino-pelvic mass reaching midway to the umbilicus. A pelvic ultrasound scan was performed and showed a latero-uterine mass, most probably on the right ovary.

CT scan: right latero-uterine mass most probably ovarian in favor of a cystadesarcoma.

The patient underwent an exploratory laparotomy latero-uterine mass at the expense of the right tube twisted, partially vascularized figure1, the O2 ovaries and the rest of the abdominal cavity were seen without particularity. A right adnexectomy was performed with anatomopathological study which was in favour of an infiltrating serous adenocarcinoma. The patient was taken back to O for further surgery, she benefited from a total hysterectomy with pelvic and lombo aortic lymphadenectomy, and an infra-colic omentectomy with peritoneal cytology and multiple biopsy

The final anatomopathological examination of the surgical parts and lymph node curage was negative. The patient did not receive any adjuvant treatment; with a regular follow-up, good locoregional control, and a 3-year follow-up

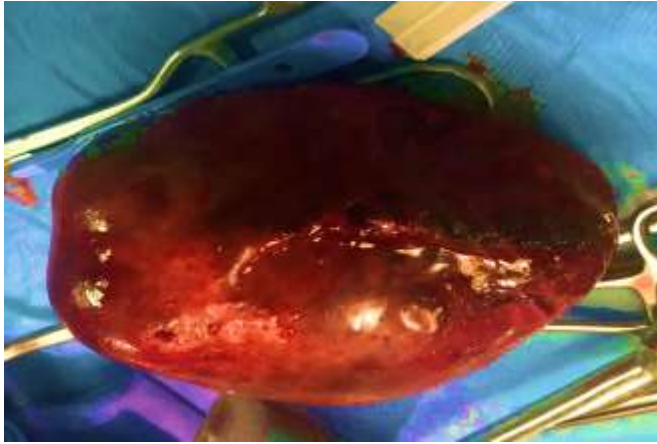


figure 1: adnexectomy specimen with tubal tumor removed.

### 3. Discussion:

Fallopian tube cancer can be primary or secondary, the primary origin is rare [1] [2] (0.3 to 1.8 % of female genital cancers), it develops in the distal part of the tube with an endoluminal starting point, its progression is in the tubal lumen with vegetations. It also spreads to the peritoneum and neighbouring organs by exfoliation of the tubal cells and by lymphatic route.

Genetic origin is often incriminated, thus BRCA 1 and BRCA 2 mutations increase the risk of tubal tumor [3]. In addition to this risk factor, nulliparity and infertility occur in 4 to 59% of cases depending on the authors. Chronic inflammatory pelvis has also been reported by some authors, however Rosenblatt did not observe an increase in cases of tubal cancer whereas cases of PID increased during the same period [5].

Histologically, serous adenocarcinoma is the most frequent histological form (50%)[6]. Other types such as endometrioid, clear cell carcinoma, transitional cell carcinoma and non-epithelial forms are rare.

A histological study of prophylactic adnexectomy specimens in patients with BRCA 1 /2 mutation found in about 14% of cases lesions of STIC intraepithelial carcinoma often found in high grade serous carcinomas of the ovary and peritoneum, indicating a possible relationship between ovarian and tubal neoplasia and peritoneal neoplasia [7] .

The clinical symptoms are rare and not very suggestive [3][8], and include pelvic pain, hydorrhea, and endouterine bleeding. Signs of digestive or urinary compression point to an advanced tumor pathology. However, the search for a family history of neoplasia is important in this type of cancer [9].

Pelvic ultrasound is the first-line examination and often shows the association of a hydrosalpinx and a highly vascularized latero-uterine mass on Doppler [10][11].

Pelvic MRI shows the same aspect and allows better visualization of the ovaries.

Hysteroscopy appears to be justified in the case of any intra-cavity image to look for an endometrial origin of a secondary tubal location [12].

Abdominopelvic CT is of interest in the search for a secondary location and should not be performed systematically.

Classification of tubal tumours is in accordance with the FIGO classification and has a prognostic and therapeutic interest.

The treatment of tubal cancer is similar to that of ovarian cancer [13] [21]. Surgery is the cornerstone of treatment and must be as complete as possible with a tumour residue of less than 1 cm. It is a total hysterectomy with bilateral adnexectomy, with pelvic and lumbo-aortic curage and infra-colic omentectomy. Initial exploration by peritoneal cytology and exploration of the abdominal cavity, particularly the subdiaphragmatic region, with multiple biopsies are essential for FIGO classification (Table 1) and condition the adjuvant treatment.

Chemotherapy combining cisplatin and paclitaxel, classically administered over six courses at three-week intervals, is still discussed for grade 1 stage Ia and Ib tumours [14].

Abdominopelvic radiotherapy remains highly debated in the literature. [14] [16].

Interval surgery remains grafted with a very important and debatable morbidity if the initial surgical effort was maximal during the first operation and if it is performed by a surgeon experienced in oncologic surgery.

The prognosis is generally poor and remains better than that of the ovary at around 40% for all stages combined, from 91% for carcinoma in situ to 25% for extra-tubal involvement [17] [18] [19] [20].

The main prognostic factors are: histological type, stage, quality of surgical excision, and postoperative histology.

Stade de la FIGO	TNM	Explication
Stade IA	T1a No Mo	La tumeur est présente dans une seule trompe de Fallope Le cancer ne s'est pas propagé aux ganglions lymphatiques du bassin ni à d'autres parties du corps
Stade IB	T1b No Mo	La tumeur est présente dans les deux trompes de Fallope Le cancer ne s'est pas propagé aux ganglions lymphatiques du bassin ni à d'autres parties du corps
Stade IC	T1c No Mo	La tumeur est présente dans une seule trompe de Fallope ou dans les deux et elle s'étend jusqu'à la surface de la trompe ou bien elle la traverse ou On observe des cellules cancéreuses dans le liquide péritonéal
Stade IIA	T2a No Mo	Le cancer s'est propagé à l'utérus ou aux ovaires mais pas aux ganglions lymphatiques du bassin ou à d'autres parties du corps
Stade IIB	T2b No Mo	Le cancer s'est propagé à d'autres tissus du bassin mais pas aux ganglions lymphatiques du bassin ou à d'autres parties du corps
Stade IIC	T2c No Mo	Le cancer s'est propagé dans la région pelvienne et on observe des cellules cancéreuses dans le liquide péritonéal
Stade IIIA	T3a No Mo	Le cancer s'est propagé de façon microscopique dans tout le bassin
Stade IIIB	T3b No Mo	Le cancer s'est propagé dans la région péritonéale et les métastases mesurent 2 cm ou moins

table 1: FIGO classification of primary tubal tumors. (TNM : tumor-nodes-metastasis)

#### 4. Conclusion:

Primary tubal cancer, is a rare neoplasia often confused with that of the ovary, MRI brings a clear help to intraoperative diagnosis. The treatment is similar to that of the ovary, a large series would be essential to establish decision trees specific to this pathology.

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