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Research Article

Primary Cancer of the Fallopian Tube: About a Case and Review of Literature

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Abstract

Primary cancer of the fallopian tube is the rarest of all gynecologic cancers; represent less than 1% of all gynecological cancers. Because of its proximity to uterus and ovary, tubal cancer diagnosis is very difficult, frequently misdiagnosed as ovarian pathology or tubal benign pathology. This may explain the underestimation of this cancer.

We report a case of bilateral primary cancer of the fallopian tube treated at the gynecology-obstetrics service of CHU Ibn Sina in Rabat in 2015, with review of literature.

According to the literature the average age varies between 58 series and 62 years, the risk factors reported are menopause, null parity, chronic tubal infections and genetic predisposition.

The abnormal vaginal discharge (hydrohématorrhe or metrorrhagia), pelvic pain and pelvic mass are the most frequent clinical manifestations, rarely present in full and the symptoms are often misleading and sometimes separated.

Usually complementary examinations (Pap smear, ultrasound, CT, MRI pelvic and hysterosalpingography) is not conclusive, explain the rarity of preoperative diagnosis. The diagnosis of tubal cancer still surgical or histological for most of the authors.

There is no specific treatment for tubal cancer and treatment is similar to ovarian cancer. The prognosis is poor with an overall survival at 5 years varies between 14% and 57%.

In general, the diagnosis is difficult and late, because of the rarity of this cancer and the clinical and histopathologic similarities with ovarian cancer, causing the poor prognosis of this cancer.

Keywords: Primary cancer of the fallopian tube; Risk factors; Clinical manifestations; Diagnosis; Treatment

Introduction

Primary cancer of the fallopian tube is the rarest of gynecological cancer; its frequency is below 1%.

Since its description by Renaud in 1847, about 2,500 cases were reported in the world literature, usually as isolated cases or short series. It is possible that the frequency of tubal cancer was underestimated because of the difficulty of diagnosis and ignorance of this cancer (where it is believed first to ovarian tumor).

Several risk factors have been discussed in the literature to explain the occurrence of this neoplasm as null parity and chronic tubal infection remain unproven.

The preoperative diagnosis rate is low for non-specific symptoms and the low sensitivity of additional tests. The diagnosis of tubal cancer is often surgery performed during the surgery or even on histological examination. The most common histological type is Adenocarcinoma.

The treatment and the optimal management of this cancer are not well defined because of its rarity. The therapeutic principles are the same as those used for ovarian cancer.

The overall prognosis of the uterine cancer is dark enough; the 5-year survival for all stages varies between 14% and 57%. This is due to the delay in diagnosis and early spread to the pelvic lymph nodes, uterus and 'ovary.

In order to identify epidemiological, pathological, diagnostic and therapeutic, scalable and prognosis of this disease, we report a case of bilateral tubal cancer treated in Obstetrics and Gynecology at the University Hospital Ibn Sina in Rabat in 2015, with review of the literature.

Observation

Ms. S.B 42 years old G5P4 name menopausal, no particular history, hospitalized for chronic pelvic pain, in which the exam is an adnexal mass left with intraperitoneal effusion syndrome.

Pelvic ultrasound revealed an adnexal mass with anechoic left partitioned as cites abundance.

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Pelvic MRI showed a left ovarian mass of tumor appearance by evoking malignancy.

An exploratory laparotomy is then indicated who found a bilateral tubal tumor strongly suspect with diffuse peritoneal granulation hence achieving a total hysterectomy with bilateral oophorectomy and multiple biopsies at the omentum and pariétocoliques gutters, the result of 'pathology is bilateral tubal Adenocarcinoma stage PT1B and granulomatous lesions of the omentum and biopsies of pariétocoliques gutters.

Then the patient was taken to surgery where a complement omentectomy and bilateral iliac lymphadenectomy are made.

The diagnosis of peritoneal tuberculosis is selected based on the pathological findings, the patient was referred for treatment antibacilaire and she also received chemotherapy with carboplatin and paclitaxel (6cures), with a good evolution for a year and then the patient was loss of life.

Discussion

Epidemiology

Cancer of the fallopian tube is a rare cancer with a frequency lying mostly below 1% of all gynecological cancers. Annual incidence varies between countries and years, some studies suggest that incidence is increasing [1-4]. It was estimated at 2.19 million per woman in 2000 in the UK [1], was 2.9 per million women in 1980 in Denmark 1.5 and 1.9 to 6.0 per million women between 1960 and 1988 in Sweden. [1] It is possible that the true incidence was underestimated [2], the fact that some cancers were mistaken mistakenly identified as tumors of the ovary during surgery and / or during pathological examination, because the histology of these tumors is identical [1,4-6]. Cancer of the trunk occurs most often between the fourth and sixth decades of life [7], with an average age varies depending on the series between 58 and 62 years. In our case the patient is 42 years old

Risk factors

Primary cancer of the fallopian tube is conventionally a cancer in postmenopausal women whose proportion varies between 60% and 85% [8.9]; in our case the patient is childbearing.

Null parity and therefore sub fertility has been reported in 3-59% of the cases according to the series. The association between childlessness and the occurrence of tubal primary cancer remains to be seen [2]. In our case the patient is multiparous. Infertility is an epidemiological factor stressed by many authors [2,7-10] tubal cancer seems to occur frequently in patients with primary or secondary infertility of tubal origin. Chronic tubal infection is variously estimated in the literature, Podratz not find a history of genital infection in 6.38% of cases [11], while Peters reports a rate of 54%. [12] No evidence is provided of the role of Chlamydia infection in the occurrence of tubal cancer. Some author discusses the possibility of carcinogenesis through chronic persistent inflammation and anti apoptotic effect of Chlamydia [13]. Genital tuberculosis has been exceptionally reported in the literature, Sedlis reports a percentage of 3% is not higher than the percentage of genital tuberculosis observed in the same conditions in the general population [2]. In our case the patient has no history of pelvic inflammatory disease, genital tuberculosis or Chlamydia. Some authors have suggested the possibility of degeneration of benign lesions of the trunk, including papilloma's [14]. Case grafted primitive tubal cancer endometriosis is reported, but the rarity of these cases does not establish a causal link [15-17].

Clinical

The tubal cancer is often asymptomatic in contrast to ovarian cancer. Hydrohématorrhée and bleeding are the most alarming symptoms. If endometrial cancer can be excluded by curettage and cervical cancer by biopsy, adnexal lesion should be mentioned [18]. Knowing that 14% of tubal cancer is diagnosed incidentally during laparotomy for another gynecological problem, usually a uterine myoma [9]. Our patient presented with symptoms pointing to a tumor of the ovary.

Para clinical

A cytology positive vaginal-cervical (cancer cells), with a negative uterine curettage and in the absence of cervical lesions, should move towards a genital cancer topmost. But its sensitivity is too low to be used in the detection of this neoplasm [19]. The lack of specific sonographic signs of tubal cancer, scarcity and ignorance of this pathology are an ovarian disease, benign uterine or tubal is suspected in an adnexal mass on ultrasound. However, preoperative diagnosis from ultrasound has been reported several times [20,21]. The development of this technique could allow, in the future, the most common diagnoses [2].

The biopsy curettage, often performed for bleeding, is positive in 8-29% of cases [12,22]. It focuses mostly to endometrial cancer diagnosis which will be corrected during surgery and histological examination of the room [23]. The scanner is an interesting examination for monitoring the disease allows research of abdominopelvic metastases and retro-peritoneal glands. Pelvic MRI is more efficient than the scanner and ultrasound in the detection of tumor infiltration of the bladder, the vagina and the side walls of the pelvis, pelvic fat, and rectum [7]. It also has a very important role in monitoring and detection of recurrence and metastasis. In our case the patient has benefited from a pelvic MRI objectified tubal uterine tumor as a latero left ovarian original mass with solid and cystic component.

Some authors [2,24] laparoscopy does not allow the diagnosis of tubal cancer because of the frequency of adhesions, the macroscopically too reassuring aspect of this neoplasm in the beginning, and the advanced age of patients. These authors suggest these drawbacks against the review in favor of an exploratory laparotomy. For other authors [25,26] endoscopy plays a key role in the positive diagnosis indicated before symptoms suggestive, this exam can give significant results

CA125 is of no interest in the diagnosis, however, high levels in the presence of an adnexal mass, especially postmenopausal women, should prompt further investigations and radiological to eliminate malignancy underlying [27]. In our case the laboratory tests revealed high levels of CA125. The diagnosis of tubal cancer remains a difficult diagnosis because of the dissociated symptoms and sometimes misleading, the low sensitivity of the investigations, and the rarity of this neoplasm. Its diagnosis is usually intraoperative, indeed, in our case the diagnosis is made intraoperatively. Preoperative diagnosis is

possible, however; it is based on an epidemiological evidence beam (age, menopause), clinical (hydrorrhea, hématorrhée, persistent bleeding with negative uterine curettage) and laboratory (adnexal mass on ultrasound and MRI) in prime condition there thought.

Pathology anatomy

The most frequently encountered malignant tumor is Adenocarcinoma. It is an aggressive tumor, morphologically close serous epithelial ovarian tumors, it is localized mostly in the distal or middle part of the trunk, frequently touches the bulb or the pavilion while the isthmus is less affected by cancer [28,29]. Its mode of growth can be nodular or infiltrative papillary with loco regional spread (ovary, uterus, peritoneum and lymph) and remote (lung, pleura, liver, kidney, breast, brain, adrenal and skin) [15]. Microscopically this tumor may be in the form of an in-situ carcinoma or invasive carcinoma (Grade I, II or III).

Classification

Due to the scarcity of tubal cancer, it is difficult to establish a classification accepted by all. Three main classifications are used: EREZ et al. [15] propose a classification into 4 stages based on operative findings, DODSON [15,30] establishes another classification inspired FIGO classification of ovarian cancer and the third classification is proposed by Schiller and SILVERBERG [15] DUCK inspired by that of colorectal cancers. The anti-cancer American Association established a TNM classification which groups the two previous [6,7,31].

We notice a proportion of less advanced stages (I, II), rather than that of the more advanced stages (III, IV). This is because, for some authors [15], that cancer of the fallopian tube is very symptomatic, and therefore attracts the attention of patients and that of the clinician. In our case the patient has a tumor stage PT1B.

Treatment

The treatment and optimum management of cancer of the fallopian tube is not well defined because of its rarity. The therapeutic principles are the same as those used for ovarian cancer because both diseases have the same histological and biological characteristics [4,8,10]. The surgical procedure involves a bilateral salpingo-oophorectomy and hysterectomy with Omentectomy, peritoneal biopsies and pelvic. Because of the risk of neoplastic transplants, conservative treatment would almost never be mentioned in cancer of the trunk [10]. Also, lymphadenectomy seems necessary for a correct staging. Due to the remote microscopic spread and relatively high risk of recurrence despite complete surgical resection, chemotherapy appears to have a solid rationale as adjuvant therapy [20]. The mono-chemotherapy not seem to be effective, the current standard chemotherapy is a combination of platinum-taxane, identical to that used in ovarian cancer [20,8,32-34].

Given its low efficiency and high rate of serious complications, the use of postoperative radiotherapy in the treatment of patients with tubal cancer is not recommended. Hormonal agents are increasingly used in the tubal cancer. The fundamentals of this use are unconvincing. Cyclical, changes similar to those of the endometrium were found in the tubal epithelium.

Therapeutic indications: Carcinoma in situ: The total hysterectomy with bilateral salpingo seems more than sufficient. The diagnosis is often made retrospectively on the surgical specimen [15].

Stage IA, IB, IC, IIA: Total hysterectomy with bilateral oophorectomy and para-aortic lymphadenectomy and pelvic combine's chemotherapy when surgical excision was incomplete or when there is a lymph node. The indications for surgery alone, without further treatment, are limited to Mac Murray [34] stage I when the tumor is well differentiated, limited to the mucosa without lymph node involvement.

Stage IIB, IIC: Surgical excision also includes a total hysterectomy with bilateral salpingo omentectomy and where possible, supplemented by partial excision visceral (bladder, sigmoid ...) if it appears feasible. With an aortic dissection low back and pelvic [15,35]. Postoperative chemotherapy is a necessary.

Stage III: The initial laparotomy often allows a tumor reduction; in some cases, simple biopsies are feasible only. In a number of cases, chemotherapy allows for a second look against which the additional treatment will involve an abdominal-pelvic radiotherapy (if favorable response to chemotherapy) or the pursuit of a new chemotherapy, or even a hormone or a drug therapy in other cases [15].

Stage IV: Due to the very poor prognosis of these carcinomas, different treatment cannot expect a palliative role laparotomy is questionable (Diagnostic), chemotherapy, sometimes radiation abdomen and can be tried [15].

Prognosis and monitoring

The overall prognosis of the uterine cancer is quite dark, survival at 5 years all stages varies between 14% and 57% [8]. In our case the patient had a good evolution for a year and then it was lost of life.

Prognostic factors: the residual volume after the initial surgery (survival rate at 5 years of 55% residual tumor is less than 1 cm in diameter, against 21% if the residual tumor is greater than 1cm [7]), histological grade, tumor stage at diagnosis (higher survival rate in the early stages), the degree of spread of the disease (invasion of the neighboring structures or distance metastases is a bad factor prognosis [7,8]), the degree of infiltration of the tubal wall (larger 5 years survival rate for patients with tumors confined to the mucosa compared to patients who have tumors invading the muscular or serous [7,9,12]), age advance, bilateralism and the tumor site in the tube (versus non fimbrial).

Conclusion

Primary cancer of the fallopian tube is a rare cancer probably underestimated and sometimes confused with ovarian or tubal pathology. The clinical signs are rarely present in full and the symptoms are often separated and sometimes misleading.

The diagnosis is usually worn during surgery or pathological examination. However Preoperative diagnosis is possible; it is based on an epidemiological evidence beam (age, menopause), clinical (hydrorrhea, hématorrhée, persistent bleeding with negative uterine curettage) and laboratory (adnexal mass on ultrasound, pelvic MRI).

The treatment and optimum management of cancer of the fallopian tube is not well defined because of its rarity. The therapeutic principles are the same as those used for ovarian cancer because of its histopathologic and evolutionary similarities. It is based on a

total hysterectomy with bilateral salpingo Omentectomy and pelvic lymphadenectomy and para-aortic followed by chemotherapy.

The prognosis is pretty bleak, improved the prognosis depends on early diagnosis. The clinic ignorance and/or radiation leads to late diagnosis of this cancer.

A well codified therapeutic management is only possible by conducting prospective studies involving large series.

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