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Clinical Therapeutic and Prognostic Aspects of Ovarian Adenocarcinomas Followed by the Medical Oncology Department of Bejaia University Hospital

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Abstract

Ovarian cancer is relatively common but serious and has a poor prognosis. The aim of this study is to highlight the epidemiological, diagnostic, therapeutic and evolutionary aspects of this malignant pathology managed at the Bejaia university hospital center. This is a retrospective and descriptive study over a period of 3 years (2019 - 2022) carried out on 20 patients who developed ovarian cancer. The average age of the patients was 50 years old, 53.23% of whom were over 45 years old. The CA-125 blood test was positive in 18 out of 20 patients. The tumors were discovered on ultrasound in 87.10% of cases and at laparotomy in 12.90%. Total hysterectomy with bilateral adnexectomy was the most performed procedure (64.52%). The early postoperative course was simple. 15 patients underwent second look surgery (16.13%) for locoregional recurrences. Epithelial tumors were the most frequent histological type (93.55%), including 79% in the advanced stage (IIIc -IV) and 21% in the early stage (Ia- Ib). Adjuvant chemotherapy was administered in 80% of patients. With a median follow-up of 36 months, 2 patients were lost to follow-up. The evolution was favorable in 27.42% and in 25.81% deaths occurred late postoperatively. Ovarian cancer is not common but serious given the advanced stages and the high rate of late postoperative deaths which were largely observed in patients deprived of adequate neoadjuvant or adjuvant chemotherapy.

Introduction

Ovarian cancer East an uncommon pathology _ but serious and bad prognosis. It represents the fourth location cancerous feminine in Algeria [1]. In 2018, the most common locations in women are breast cancer (37.2%) and gynecological cancers (cervix, ovary) which together represent 44.9 % of cancers. The particularity of ovarian cancer lies in its character silent responsible for a diagnostic delay and difficulty therapeutic especially in its shapes extents [1]. In order to improve the prognosis of patients by socket early care , screening methods _ _ systematic including a dosage of CA 125 and a ultrasound endovaginal have summer proposed but the results were disappointing [2-5]. The catch in charge remains difficult in the centers means equipped like ours . _ Improved prognosis _ seems complicated since the majority of cases diagnosed are at the stadium locally advance . In the light of our study and through a

review of the literature, we discuss particularities _ epidemiological, diagnostic, therapeutic and evolutionary of this tumor smart socket in charge at the Béjaia University Hospital Center.

Methods

Béjaia Université Hospital and the radiological department of CPMC Algiers. A consecutive series of 20 patients operated on for malignant ovarian tumors between January 2019 and December 2022. Data collection was done by general practitioners on the files of the department 's archives . The 20 complete files were retained for carrying out this work. The date of last follow-up was January 2019 to December 2022. Data were collected from observation notebooks, hospitalization, and operative reports. The information obtained was entered into a database in the form of an Excel table, allowing statistical analysis to be carried out using SPSS software. Due to the small numbers of the subgroups, the statistics carried out on this series were only descriptive.

Results

The series analyzed included 20 patients with ovarian cancer, representing 0.90% of malignant tumors observed in women during the study period. The average age of the patients was 50 years with extremes of 13 and 77 years.

Table I:

Number of patients analyzed	Median	High grade ADK (III and IV)	Grade ADK (I and II)
20	50 years	06 (60%)	04 (40%)
Percentage of relapses (06-12 months)		50%	0%

Table II: Frequency of symptoms and clinical signs.

Call signs observed	Percentage (%)
Pelvic pain	61.29
Increased abdominal volume (Ascites)	32.26
Palpable pelvic mass	20.97
Metrorrhagia, menorrhagia	17.74
Lower limb edema	6.45
Fever	4.84
Asthenia, anorexia, weight loss, pallor	9.68
Amenorrhea	3.24
Transit disorder, vomiting	4.84

Table III: Family history of ovarian cancer and/or breast cancer.

History of cancer in the family		Effective Percentage (%)
Cancer of the digestive tract	1	6.45

History of cancer in the family		Effective Percentage (%)
Gynecological cancer (ovary, uterus, breast)	2	9.68
Prostate cancer	0	0
Lung cancer	0	0
None	17	85
Total	20	100

Table II: Summary of cases of remission or tumor stability

Patient ID, Age	Type of ovarian carcinoma	Immuno - Histopathology analysis	Tumor markers	Type of debulking surgery	Adjuvant chemotherapy	Follow up after treatment
02/22, 50 years	High grade Cystadenocarcinoma , Grade III +ADP	CK7+ hormonal rec ROposRPneg P16 pos P53pos.	CA125 CA19.9	Primary	Carboplatin + Paclitaxel , (06 courses)	09 months after the end of Cure 6, absence of tumor reccurence (TDM-TAP)
03/22, 49 years	Ovarian adenocarcinoma grade I with intrapelvic metastasis	CK1pos, CK20neg, WT1neg, RO/RP pos, CD*2 neg, CDX2neg, viemtin pos	AFP 1.31, ACE3.22, CA19.9 6236, CA125 221.20	Primary	Carboplatin + Paclitaxel + Bevacizumab (09 courses)	01 month after Cure 9, partial reduction of the peritoneal carcinoma (CT-TAP)
05/22, 42 years	Ovarian ADK, grade I (Endometrioid), 2017		CA125 neg	Primary (affected right ovary)	-	From 2017, no relapses. Patient in good health . Post- surgery , birth 03 healthy kids
06/22, 27 years	High grade serous adenocarcinoma , pT1C2	CK7 WT1 RO RP positive. P16 heterogeneous P53 positive.		Primary	Carboplatin + Paclitaxel , (06 courses)	08 months post-cure 6, no tumor regression .
07/22, 60 years	2003: Right ovary tumor . 2016: Left ovary tumor . 2022, Differentiated Peritoneal ADK with hyperandrogenism	CK7+/CK20 neg P53 neg, RE focal mark	AFP Neg, ACE neg, ,CA19.9 neg, CA125 2015	Primary	-	12 months after hysterictomy , no tumor regression

Table III: Summary of cases of tumor relapse

Patient ID, Age	Type of ovarian carcinoma	Immuno - Histopathology analysis	Tumor markers	Type of debulking surgery	Adjuvant chemotherapy	Neoadjuvant chemotherapy	Follow up after treatment
04/22, 49 years	High grade serous adenocarcinoma , Grade III (Peritoneal metastasis +ADP)		ACE 1.40 and CA125 6418.00	-	-	Line 01: Carboplatin + Paclitaxel + Bevacizumab (09 courses) Line 02: Gemcitabine J1-D8), 03 courses Line 03: Irinotecan 250mg, 03 courses	Tumor progression under Carboplatin + Paclitaxel + Bevacizumab . Tumor progression under Gemcitabine
13/22 64 years	Metastatic Pappillary ADK, TNM IVB, +ADP			1) Annexectomy , 2) 06 cures (Carbo + Paclitexel + Bev), 3) Colpohysterectomy . 4) 06 cures (Carbo + Paclitexel + Bev), 5) 02 cures of Bev maintenance, Relapse, 6) 2 nd line, Irinotecan			Tumor progression under Bevacizumab maintenance

Table VI : Histological type

Histological type		Effective Percentage (%)
Serous and endometrioid tumors	13	65
Mucinous tumors	2	10
Clear cell tumors	2	10
Mesenchymal tumors	1	5
Mixed tumors	1	5
Germ cell tumors	1	5
Total	62	100

balance sheet extension included mainly ultrasound examinations of the abdomen (13 cases: 64.5%). 16 patients underwent a thoraco - abdominopelvic (TAP) scan (80%). Preoperatively, a biopsy lymphadenopathy inguinal with analysis histology was done in three patients. The markers tumor dosed were : CA-125 positive (>35IU) in 10 out of 12 patients , Alpha Feto-Protein (AFP) negative in one patient in two, Antigen Carcino-embryonaire (CEA) negative in a patient and CA 19-9 negative in two others. Fluid cytology ascites was performed in 15 patients, the average size of the tumors was 9 cm (extremes, (5 and 25cm). The location ovarian lesions were unilateral in 4 cases (71%) and bilateral in 12 cases (60%).

79.03 % of cancers at stage advanced (IIIc-IV:) and 21% at stage early (Ia-Ib). Distribution of patients _ according to WHO criteria were poorly differentiated tumors in 7 cases (35.48%), well differentiated in 3 cases (17%), undifferentiated in 6 cases (30%) and borderline type in 3 cases (16 %). In the adjuvant situation , 14 patients have benefited of a chemotherapy (22.58%) whose protocol was in the majority of cases based on platinum salts and taxane . On average , the number of treatments was equal to 3 (range : 1-9). Corticosteroid therapy was administered in 6 patients (9.68%). The molecules used have summer: methyl- prednisolone in 3 cases, dexamethasone in 2 cases and prednisolone in one case. During the period of study. The evolution was favorable in 7 cases (35%) and in 5 cases the deaths occurred. occurred in postoperative late (25%). The survival global observed at three years was 38.71%.

Table VI: Summary of cases of relapses in elderly patients (>70 years)

Patient ID, Age	Type of ovarian carcinoma	Immuno - Histopathology analysis	Tumor markers	Type of debulking surgery	Adjuvant chemotherapy	Neoadjuvant chemotherapy	Follow up after treatment
01/22, 75 years	Endometrioid adenocarcinoma (WHO class II)			Primary	Carboplatin + Paclitaxel , (06 courses)	-	At the end of Cure 6, Intestinal occlusion due to tumor progression to peritoneal ADK
08/22, 74 years	Metastatic Pappillary ADK, TNMIVB, +ADP	CK7+, CK20neg pax08+, gata3RP heterogeneous +/-, WT1: caltretinin / vimentin : negative , CK20, RO, racemase /CDX2/ napsin A: negative .	ACE neg, CA15.3 209.96; CA125 199.8? CA19.9 113	-	-	Carboplatin + Paclitaxel , (02 courses)	Aftercare 2: Poor health conditions (death of the patient)

Discussion

Ovarian cancer occurs when an invasive tumor develops in one of the three main types of cells that make up the ovaries. The majority (approximately 90%) of ovarian cancers start in the epithelial cells that cover the outer surface of the ovary1. By comparing our series of patients with studies already carried out in other hospital centers, we observed that the management of ovarian cancer at Bejaïa University Hospital and its different tumor characteristics are representative. For example, in the category of histological types, the serous type is the most common, it is found in 65% (N=13) of cases, followed by the mucinous type with 14% (N=3) of cases. Comparing with two other retrospective studies including 287 and 103 patients respectively, it was observed that the serous histological type is the most frequent among all the histological types of ovarian tumors, respectively 44% and 72% of cases.7,10. It has been described that young women suffering from ovarian cancer very often carry a hereditary syndrome (BRCA or Lynch syndrome). We observed in our study that in women aged less than 40 years, only 3 patients (15%) have

a family history which is positive for breast or colon cancer. By analyzing the family history of cancer(s) in patients of all ages, the most common tumor pathology is digestive cancer. The calling signs are insidious and do not appear that in case of tumors evolved . The suggestive symptoms reported have summer: bloating, increased abdominal volume, asthenia, urinary problems, pain pelvic or abdominal [5]. The objective of the research was therefore to establish a diagnosis in the subclinical phase. Thus, many studies have summer published in order to put set up a screening systematic [6-7]. The combination of CA 125 dosage with ultrasound endovaginal was _ a long time proposed but the results were disappointing [8]. The established consensus n / A recommended screening only in predisposed women [9]. Women without a family history of ovarian cancer were not considered [9]. However, the circumstances of discovery are often fortuitous during ultrasound examinations (87.1% in our series) requested for multiple reasons [10]. The advantage with ultrasound is to be able to suspect the malignant nature of tumors ovaries in putting in evidence a ascites , contour irregularity and entanglement anarchic solid structures Or fluids from the tumor mass . She permits also to discover stadiums _ early but in the context of screening systematic . What is difficult to achieve in disadvantaged areas . In this context , the CA 125 is valuable help _ allowing data to be reported radiologically suspicious . Indeed , it is the most sensitive and most used marker at the time of diagnosis to assess the possibility of resection . completeness , sensitivity to chemotherapy and for the diagnosis of recurrences [11,12]. However, its reliability in prevention primary East insufficient since only 50 to 60% of ovarian cancers stage, I have a high CA 125 with a value very low positive predictive value (10%) [13]. Alternatively, looking for abnormal cells in the fluid ascites was proposed but little contributory and therefore less practiced . As a summary extension, TAP CT, feasible in our center, is especially essential in preoperative if a surgery East possible or to monitor efficiency of a second chemotherapy _ line [12]. ultrasound abdominal which can put in evidence of lesions metastatic respectively at the level pulmonary and hepatic . In sophisticated expert centers, detection of recurrences is especially advantageously assessed by the determination of CA 125, performance of a TAP and PET-CT scan [12]. Apart from its initial diagnostic interest , this CA 125 dosage is also interesting in the evaluation of response to treatment .

Conclusion

Ovarian cancer represents 3% of female cancers. Age and condition general of patients are linked to the initial stage of the disease , assessed by the FIGO classification. This stadium East himself a postman prognosis major influencing survival . _ The catch surgical management of the disease initial, intended for resection complete (R0), is an element socket key in therapeutic care. The predisposition genetic by mutation of the BRCA 1 and 2 genes is both a risk factor for ovarian cancer and a factor prognosis of good response to chemotherapy treatments based on platinum salts . He is clearly demonstrated that one surgery optimal and chemotherapy adjuvant or neoadjuvant are currently the most beneficial treatments for patients suffering from an ovarian cancer. As the demonstrated our research , patient survival having a tumor ovarian , is correlated mainly at the FIGO stage of the tumor ovarian . What's more other studies have clearly observed that the resection tumor after cytoreduction surgical remains one of the factors most important prognoses . He was not possible by our analysis to observe a significant difference in survival in function of this variable. In fact, we have summer limited in our research mainly by the lack of data in the protocols operations and reports anatomopathological and especially molecular totally absent from our level, we had a small number of patients. It would be interesting later, to deepen our research, in analyzing

profile on responses _ therapeutic according to profile molecular notably the BRACA mutations in including anti parp unavoidable today in the treatment of this type of cancer.

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