

Endometrial cancer: department experience

C. Chekman¹, F. Dr Gouaref¹, A. Bouzid¹, K. Akbal¹, F. Hadjarrab², K. Bouzid²
A. Boufenara³, K. Bentabak¹

(1) Oncologic Surgery A, CPMC hospital, Algiers-Algeria

(2) Medical Oncology, CPMC hospital, Algiers-Algeria

(3) Anatomopathological department, CPMC hospital, Algiers-Algeria

Abstract:

Background: to evaluate the results of the surgical treatment and the prognostic elements in our patients.

Material and method: from January 2016 to December 2018, 86 patients were operated on in the oncological surgery department A of the CPMC.

Results: The mean age of the patients was 58.54 years [32-88], more than half had a history of metabolic disease, five patients had a history of lynch syndrome.

Fifty-four patients were classified ASA II, 62.7%; the most frequent histological type in our population is type I (endometrioid adenocarcinoma) [84%], the majority of patients were classified stage I by FIGO (International Federation of Gynecologists and Obstetricians), i.e. (62.7%) in preoperative and (52%) postoperative after definitive anatomic-pathological results. Adjuvant treatments depended on these final results.

Conclusion: Endometrial cancer is considered favorable because it is most often limited to the uterus. Nevertheless, this is a heterogeneous pathology and the overall 5-year survival can vary from 92% to 42% in stages I of FIGO depending on the histological characteristics of the tumor.

Keywords: endometrial cancer, lymphadenectomy, lymphovascular invasion, radiotherapy, chemotherapy.

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I. Introduction

Endometrial cancer is the most common gynecological cancer in developed countries. In terms of incidence, it ranks 4th among cancers in women. (1,3,4)

It occurs most often in postmenopausal women between 55 and 65 years old. In 14% of cases in the premenopausal period and in 05% of cases before age 40. (1, 13)

II. Material and method

From January 2016 to December 2018, 86 patients were treated for endometrial cancer. The patients had previously undergone a biopsy curettage, a pelvic MRI and a complete preoperative assessment, the final pathological examination was carried out at the level of the anatomopathological department of the Pierre and Marie Curie Center (CPMC).

The anatomic-clinical aspect, the histological type and the results after surgery were analyzed retrospectively.

III. Results

The mean age of our patients was 58.54 years [32-88], 25 patients were nulliparous, more than 50% had a history of metabolic disease and five patients (5.8%) had a history of lynch. The average body mass index (BMI) was 32.96 Kg / m² [20-53], 54 patients were classified ASA II or 65%. Type I (endometrioid adenocarcinoma) was the most common histologic type (84%) while type II (serous, clear cell adenocarcinoma and carcinosarcomas) with a poorer prognosis accounted for 15%.

According to the FIGO classification; preoperatively: 62.7% was classified as stage I, 11.6% was classified as stage II, 19.7% was classified as stage III and 02% was classified as stage IV. Postoperatively, the FIGO classification did not change much compared to the preoperative: stage I (52%), stage II (10%), stage III (30%) and stage IV (03%).

Surgical management included total hysterectomy with bilateral adnexectomy, sometimes pelvic and / or lumbar-aortic lymphadenectomy was associated.

Pelvic dissection was performed in 52% of cases and lumboaortic in 11%, the sentinel node technique was not performed in our series. According to the final anatomopathological results on surgical specimens,

adjuvant treatment was associated: chemotherapy in 21%, brachytherapy in 21% and radiotherapy in 29% (summarized in Table 1).

Table (1) :characteristics of the sample

Caractéristiques	Patients(n=86)
Age	58,54 (32-88)
History	05 Lynch disease, metabolic disease >50% ,25 nulliparous
BMI (Kg/m2)	32,96 (20-53)
Histological type	Type I=73 (84%) ; type II=13 (15%)
FIGO pre-op	I=54(62,7%), II =10 (11,6%), III=17(19,7%), IV=2(2%), NP=3(3%)
FIGO post-op	I=45(52%), II=9 (10%), III=26(30%), IV= 3(3%), NP=3(3%)
Tumor size (cm)	5,43 (1,5-12)
Lymphnodepelvic dissection :45(52%)	+16 (18%) -29 (33%)
Aorticlymphnodedissection:10 (11%)	+5(05%) -5(05%)
Number of nodes	16,64 (2-38)
Lympho vascular involvement	Yes :19 (22%) no :67(77%)
Adjuvant treatment	CT :18 (21%), curietherapy :18(21%), RTH : 25(29%)

CT: chemotherapy, RTH: radiotherapy

The risk of recurrence is estimated on the basis of prognostic criteria grouping together various groups (low risk of recurrence, intermediate risk and high risk); summarized in Table 2.

Table 2: classification of relapse Preoperatively

Low risk	Intermédiaire risk	High risk
IA G1-G2 =25 (29%)	IA G3=3 (3%) IB G1-G2=23 (27%) Total: 30%	IB G3 =3 (3%) Stade II =29 (33%) Type II =13 (15%) Total :52%

After definitive anatomopathological examination:

Low risk	Intermédiaire risk EV-	High intermédiaire risk EV +	High risk
IA G1-2, EV – 18 (21%)	IA G3 4 (4,6%) IB G1-2 :17 (19,7%)	IA G3 IB G1-2	IB G3 :1 (1%) >stade II :37 (43%) Type II : 6(6%)
21%	24%	4,6%	50%

EV: vascular emboli

IV. Discussion

Endometrial cancer is the fourth leading cause of cancer in women, and is a pathology in industrialized countries [1,8]. In 2018 worldwide, nearly 382,100 new cases of endometrial cancer were identified, which represents approximately 4.4% of new cases of cancer in women.(13)

The prognosis of this cancer is deemed favorable, Overall survival at 5 years is estimated at 80% for stages I of FIGO: (tumor limited to the body of the uterus), 60% for stages FIGO II, 30% for FIGO III stages and 5% for FIGO IV stages. (2). However, it is a heterogeneous pathology and overall 5-year survival can vary from 92% to 42% in stages I depending on the histological type and grade of the tumor.(2)

ESMO (European Society of Medical Oncology) associated with work PORTEC (1,2,3) [Postoperative radiotherapy in endometrial carcinoma] has established a prognostic classification based on the risk of relapse in the early stages (stage I of FIGO) on which adjuvant therapy depends on it. In our series, we had 21% low risk; 24% intermediate risk; 4.6% high intermediate risk and 50% high risk. (12)

This cancer is associated with multiple comorbidities such as overweight, arterial hypertension and diabetes, the cardiovascular, renal or neurological complications of which must be taken into account in the therapeutic strategy.(2,3)

The risk factors for this pathology are relatively well known: the genetic predisposition of the HNPCC type (hereditary colorectal cancer without polyposis), the incidence of hereditary endometrial cancer is from 1.8% to 2.3%.(3), and factors linked to hyperestrogenesis.(2,12)

In the vast majority of cases, endometrial adenocarcinomas are discovered at a localized stage (80% stage I) with a favorable prognosis and will be cured immediately after surgery and brachytherapy

or radiotherapy according to the risk of relapse.(1,3,4,12). However, survival in patients with metastatic or recurrent disease is generally poor.(14,16)

If radiotherapy and chemotherapy play an increasingly important role in the treatment of endometrial cancer, the initial management of this pathology remains surgical.(1,2,6). Hysterectomy with bilateral adnexectomy, initial lymphadenectomy or restaging according to the final pathological results is the sanction in the majority of cases when the patient is operable. In addition to its curative character and its impact on overall survival, surgery allows the tumor staging necessary for the choice of complementary treatments.(1,6,7,10,15)

Several authors suggest that lymphadenectomy is performed in the group with high intermediate risk and high risk of recurrence.(5,10,15). Two prospective randomized studies have shown the benefit of lymphadenectomy in endometrial cancer (Benedetti Panici et al. 2008; Kitchener et al. 2009) in the high risk group.(11)

Randomized trials have failed to demonstrate relapse-free survival benefit in stage I endometrial cancer.(15)

Studies have found several clinicopathologic factors with predictive value for tumor recurrence and worse survival, such as advanced age, deep myometrial invasion, grade 3 disease and lymphovascular invasion (LLI).(14,17,19)

In fact, lymphovascular invasion has long been considered a potential adverse prognostic factor in endometrial cancer. Studies found that ILV-positive patients had a higher rate of lymph node metastases (19) and were more likely to have local or distant relapse and generally had shorter overall survival (OS). (14,18, 19,20)

In our population, the risk factors for relapse are the most lymphovascular invasion and stage III.

The various gynecological oncology scientific societies consider all ILVs as a risk factor and recommend that patients with positive ILVs receive adjuvant treatment after surgery. (14)

V. Conclusion

Endometrial cancer is increasingly recognized as being very heterogeneous, like several types of biologically different tumors. For early stage diseases, the current practice is surgery followed by brachytherapy. Radiotherapy and / or chemotherapy, guided mainly by histopathological parameters, are mainly therapeutic weapons for the high risks of relapse.

References

- [1]. M. Poilblanc, N. Mesgouez-Nebout, C. Lhommé et al : prise en charge des cancers de l'endomètre ; Volume 8 > n°2 > avril 2013
- [2]. Marcos Ballester, Sofiane Bendifallah, Emile Daraï et al : Nouvelles recommandations EMSO, ESGO, ESTRO sur la prise en charge des cancers de l'endomètre : Bull Cancer (2017)
- [3]. Yeh C. Lee, Stephanie Lheureux, Amit M. Oza : Treatment strategies for endometrial cancer : current practice and perspective ; Curr Opin Obstet Gynecol 2017, 29 :47 – 58.
- [4]. Nicoletta Colombo, Carien Creutzberg, Frederic Amant et al, ESMO-ESGO-ESTRO Consensus Conference on Endometrial Cancer Diagnosis, Treatment and Follow-up; International Journal of Gynecological Cancer & Volume 26, Number 1, January 2016.
- [5]. Robert Foerster, Robert Kluck, Nathalie Ariens, et al; Lymphadenectomy in women with endometrial cancer: aspiration and reality from a radiation oncologist's point of view; Foerster et al. Radiation Oncology (2015) 10:147.
- [6]. Dominik Denschlag, Uwe Ulrich, Günter Emons: The Diagnosis and Treatment of Endometrial Cancer; DtschArzteb Int 2011; 108(34–35): 571–7
- [7]. Efficacy of systematic pelvic lymphadenectomy in endometrial cancer (MRC ASTEC trial): a randomised study: Vol373 January 10, 2009
- [8]. Catherine Genestie, Alexandra Leary, Mojgan Devassoux-Shisheboran et al ; Classification histologique et moléculaire des cancers de l'endomètre et leurs implications dans la thérapeutique ; Bull Cancer (2017).
- [9]. Stephanie M de Boer, Melanie E Powell, Linda Mileschkin et al; Adjuvant chemoradiotherapy versus radiotherapy alone in women with high-risk endometrial cancer (PORTEC-3): patterns of recurrence and post-hoc survival analysis of a randomised phase 3 trial; Vol 20 September 2019.
- [10]. A.-S. Bats, C. Bensai d, C. Huchon, C. Scarabin, C. Nos, F. Lecuru : Actualité du traitement du cancer de l'endomètre : faut-il faire des lymphadenectomie et lesquelles ? : Gynécologie Obstétrique & Fertilité 38 (2010) 754–759.
- [11]. Holm Eggemann· Tanja Ignatov· Katharina Kaiser et al; Survival advantage of lymphadenectomy in endometrial cancer; J Cancer Res Clin Oncol
- [12]. N. Colombo, C. Creutzberg, F. Amant et al; ESMO-ESGO-ESTRO Consensus Conference on Endometrial Cancer: diagnosis, treatment and follow-up: Annals of Oncology 0: 1–26, 2015.
- [13]. Clémentine Owen, Sofiane Bendifallah, Aude Jayot et al : Stratégies ganglionnaires dans les cancers de l'endomètre ; Bull Cancer (2019).
- [14]. Yibo Dai, Yangyang Dong, Yuan Cheng et al; Prognostic significance of lymphovascular space invasion in patients with endometrioid endometrial cancer: a retrospective study from a single center: J Gynecol Oncol. 2020 Mar;31(2): e27.
- [15]. N. Colombo, E. Preti, F. Landoni, et al; Endometrial cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up: Annals of Oncology 24 (Supplement 6): vi33–vi38, 2013.
- [16]. Rebecca A. Brooks, MD; Gini F. Fleming, et al; Current Recommendations and Recent Progress in Endometrial Cancer: CA Cancer J CLIN 2019;69:258–279.
- [17]. Azmat H. Sadozye & Rosie L. Harrand & Nick S. Reed: Lymphovascular Space Invasion as a Risk Factor in Early Endometrial Cancer; Curr Oncol Rep (2016) 18:24.
- [18]. William T. Creasman, Shamshad Ali, David G. Mutch et al; Surgical-pathological findings in type 1 and 2 endometrial cancer: An

- NRG Oncology/Gynecologic Oncology Group study on GOG-210 protocol:Gynecol Oncol (2017).
- [19]. Neil S. Horowitz, M.D, David G. Mutch, et al: Should the Presence of Lymphovascular Space Involvement Be Used to Assign Patients to Adjuvant Therapy Following Hysterectomy for Unstaged Endometrial Cancer? *Gynecologic Oncology* **87**, 243–246 (2002).
- [20]. Sofiane Bendifallah, MD, PhD, Morgane Perrin, et al: Honing the classification of high-risk endometrial cancer with inclusion of lymphovascular space invasion:*Surgical Oncology* 26 (2017) 1-7.

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