



RESEARCH ARTICLE

EVALUATION OF DISCORDANCE OF ENDOMETRIAL BIOPSY AND BIOPSY CURETTAGE FINDINGS AND SURGICAL SPECIMEN ANALYSIS IN ENDOMETRIALCANCER:ABOUT 58 CASES :

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Abstract

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Introduction:-

Endometrial cancer is the 4th most common gynecologic cancer in Morocco, its therapeutic management is adapted to the histopronostic stage of the disease.

This staging is based on anatomopathological examination (histological type, histopronostic grade) and on imaging (degree of myometrial invasion, cervical involvement, and locoregional lymph node involvement) highlighted by the preoperative work-up; confirmed or affirmed by anatomopathological analysis of the operating room.

Hence the aim of this work which will retrospectively evaluate the discrepancy between the results of the preoperative histological work-up (Biopsy and Biopsy Endometrial Curettage) and the anatomopathological analysis of the surgical specimen in terms of histological type and Histopronostic grade of the endometrial cancer

Materials And Methods:-

Patient Selection and Methodology :

This is a retrospective observational study of a series of patients operated on for endometrial cancer and having benefited from a preoperative histological assessment, carried out from January 2013 to December 2017, at the National Institute of Oncology in Rabat, involving 58 patients.

Statistical analysis :

Data from the pathological analysis of the biopsy or biopsy curettage were collected using an evaluation form from the initial reports of the biopsy or biopsy curettage of the endometrium and then compared with the postoperative histological data by looking at the histological type of cancer and the histopronostic grade.

Concordance of histological type, sensitivity, specificity, positive and negative predictive values for histopronostic grade of the preoperative histological workup against the results of the final pathological analysis of the surgical specimen were performed manually.

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Results:-

Interpretation of results :

58 patients were included.

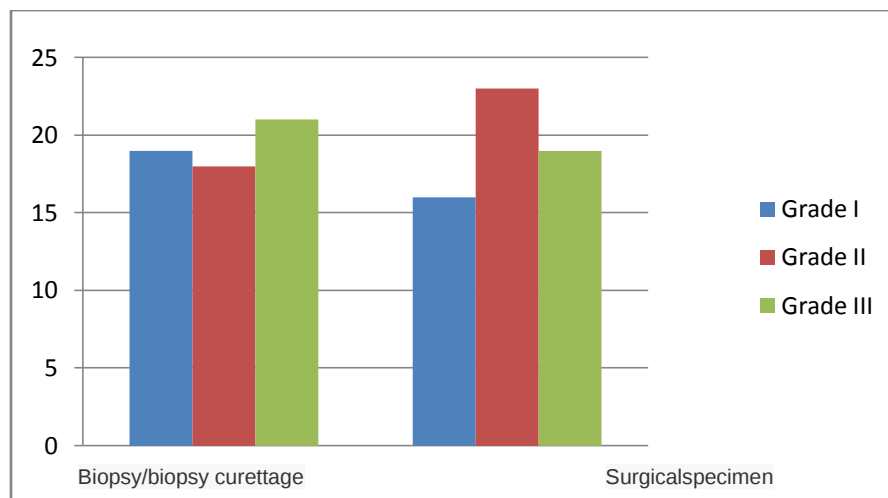
Concordance in histological type was found in 65.26% of cases (Table 1).

Regarding the histopronostic grade, 21 patients had grade III in the preoperative pathology work-up and 37 patients had grade I or II; while on pathology examination of the surgical specimen, 19 patients had grade III and 39 patients had grade I or II (Graph 1).

Thus, the preoperative pathology assessment has a sensitivity of 73.68%; a specificity of 82.05%; a positive predictive value of 66.66% and a negative predictive value of 86.48% in the evaluation of the histopronostic grade (Table 2).

Histological type	Endometrioid Adenocarcinoma	Clear cell Adenocarcinoma	Papillary Adenocarcinoma	Carcinosarcoma	Undifferentiated carcinoma	Other
Biopsy/ biopsy curettage	37	2	9	4	3	3
surgical specimen	49	2	1	5	0	1

Table 1:- Performance of the preoperative pathology work-up in assessing histological type.



Graph 1:- Histological grade on the pathology report and on the surgical specimen.

	Sensitivity	Specificity	Positive predictive value	Negative predictive value
Histological grade	73,68%	82,05%	66,66%	86,48%

Table 2:- Performance of the preoperative pathology assessment in the evaluation of the histological grade.

Discussion:-

Endometrial biopsy and endometrial biopsy curettage is the preoperative histological work-up used in the diagnosis of the type and histological grade of endometrial cancers.

The Cornier Pipelle endometrial biopsy is a minimally invasive technique performed without anaesthesia; in consultation or ambulatory hysteroscopy or blind sampling; its performance is proven in the literature. Its accuracy is higher in postmenopausal women than in premenopausal women [1].

However, this technique has limitations with a risk of false negatives encountered in cases of endometrial thickness less than 5mm, also in cases of localised tumour or tumour developed at the site of a polyp; in these cases the tumour may be undetectable [2-3].

Similarly, several studies show that even unguided biopsy curettage for localised tumours may have a failure rate of 38-100% [3].

In addition; Type II endometrial cancers that usually develop over a polyp or atrophic endometrium may have a higher failure rate of biopsy or endometrial biopsy curettage [4-5].

However, another retrospective study showed a high sensitivity of endometrial biopsy and biopsy curettage in detecting high-grade endometrial cancer[6].

Limitations:

Several limitations were encountered in our study.

Indeed, this is a retrospective monocentric study involving only 58 patients over a short period of time with all the resulting biases.

Although our study is retrospective, recruiting few patients, and was conducted over a short period of time, the results obtained are in line with those of the literature.

Conclusion:-

The performance of the preoperative pathology work-up in endometrial cancer remains poor, with poor agreement in histological type required between the preoperative and postoperative pathology work-up with low sensitivity in histopronostic grade assessment, suggesting the always unique performance of the surgicalspecimenpathologystudy.

References:-

- [1] Dijkhuizen FP, Mol BW, Brolmann HA, Heintz AP. The accuracy of endometrial sampling in the diagnosis of patients with endometrial carcinoma and hyperplasia: a meta-analysis. *Cancer* 2000;89(8):1765-72.
- [2] Elsandabesee D, Greenwood P. The performance of Pipelle endometrial sampling in a dedicated postmenopausal bleeding clinic. *J Obstet Gynaecol* 2005;25(1):32-4.
- [3] Guido RS, Kanbour-Shakir A, Rulin MC, Christopherson WA. Pipelle endometrial sampling. Sensitivity in the detection of endometrial cancer. *J Reprod Med* 1995;40(8):553-5.
- [4] Jordan LB, Abdul-Kader M, Al-Nafussi A. Uterine serous papillary carcinoma: histopathologic changes within the female genital tract. *Int J Gynecol Cancer* 2001;11(4):283-9.
- [5] Trahan S, Tetu B, Raymond PE. Serous papillary carcinoma of the endometrium arising from endometrial polyps: a clinical, histological, and immunohistochemical study of 13 cases. *Hum Pathol* 2005;36(12):1316-21.
- [6] Huang GS, Gebb JS, Einstein MH, Shahabi S, Novetsky AP, Goldberg GL. Accuracy of preoperative endometrial sampling for the detection of highgrade endometrial tumors. *Am J Obstet Gynecol* 2007;196(3):243e1-5.