

Endometrial Cancer: Discrepancy Between FIGO Stage and Radiosurgery, Discrepancy between Histological Type and Grade Before and after Surgery

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Abstract

Endometrial cancer is one of the most common gynaecological tumours in the world. Its incidence is increasing, especially in industrialised countries. Treatment is mainly surgical but there are other alternatives. We report Retrospective study carried out in the Gynaecology and Obstetrics II Department of the Hassan II University Hospital, Fez, between January 2019 and August 2022 on 62 cases of endometrial cancer looking for concordance between clinical, investigation, histology, classification FIGO, and grade after surgery.

Keywords: gynaecological tumours, Endometrial cancer, Gynaecology and Obstetrics, Fez.

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INTRODUCTION

Endometrial cancer is one of the most common gynaecological tumours in the world. Its incidence is increasing, especially in industrialised countries. It is treated mainly by surgery, but unfortunately it is sometimes treated either excessively or inadequately, given the discrepancies between pre- and post-op (FIGO stage, histological type and grade). It should be noted that the new classification into 4 prognostic risk groups incorporates molecular analysis data (p53, MSI, POLE) to guide the initial surgical management as well as the modalities of adjuvant treatment.

METHOD

Retrospective study carried out in the Gynaecology and Obstetrics II Department of the Hassan II University Hospital, Fez, between January 2019 and August 2022 on 62 cases of endometrial cancer.

The data were collected from the patients' files and the Multidisciplinary Consultation Meeting forms.

RESULTS

The age range most frequently affected: between 50 and 70 years of age percentage of 67%

(figure 1), 50% of patients are obese (figure 2), In our series, 48% of patients were multiparous, 37% nulliparous (figure 3), The majority of patients were postmenopausal 82% (figure 4), Postmenopausal metrorrhagia was the main reason for consultation in 90% of patients (figure 5), General condition was preserved in most (figure 6) and gynecological examination is often normal (figure 7), Pelvic ultrasound performed in almost all patients, showing endometrial thickening in 65% of cases (figure 8), Hysteroscopy was often used to direct biopsies (77%), The most frequent histological type was endometrioid adenocarcinoma in 67% of cases (figure 9), The FIGO classification was concordant in 49% of cases, both pre- and postoperatively (figure 10,11), The most frequent histological type was endometrioid adenocarcinoma, with a discrepancy in 31% of the other types (figure 13), concerning the histological grade we had a percentage of 14,28% of Upgrade contrary to 19% of Down grade in a group where the histological type is obtained by pipelle of cornier, et we had an upgrade of 10% and Downgrade of 20% in the group where the histological type made by a directed biopsy (figure 12).

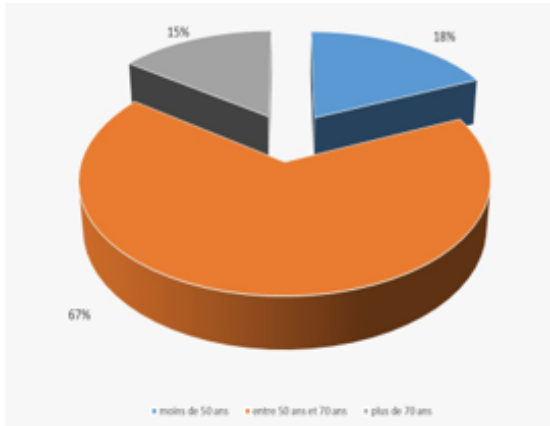


Figure 1: Breakdown by age group percentage

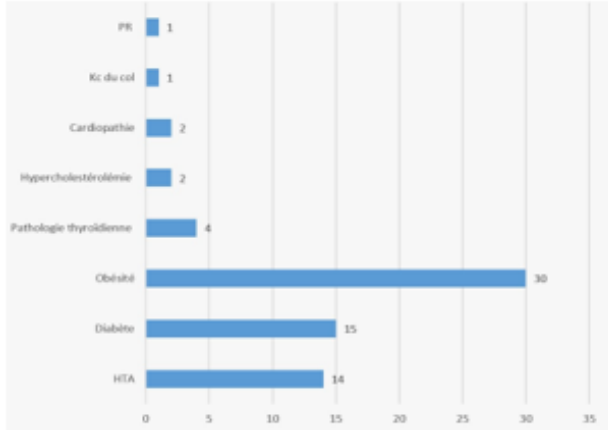


Figure 2: Medical history of our patients

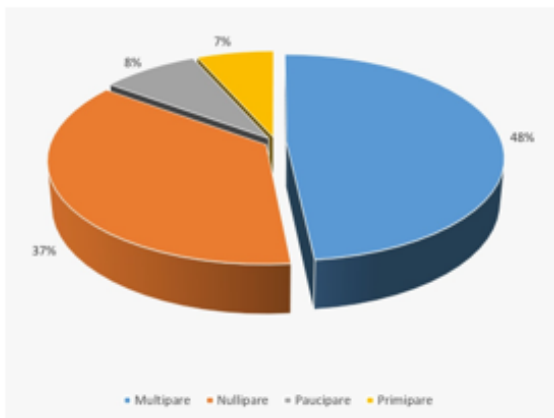


Figure 3: breakdown by parity

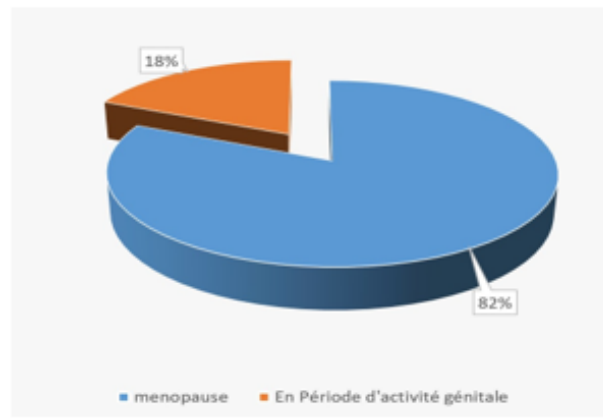


Figure 4: hormonal status

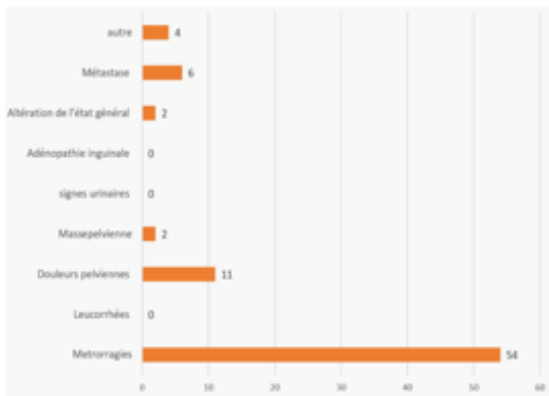


Figure 5: Discovery circumstances

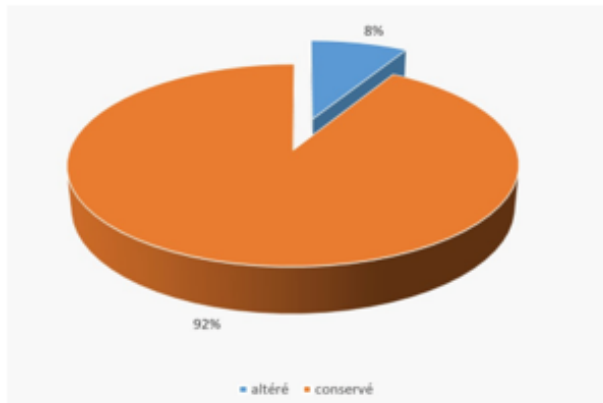


Figure 6: Patient's general condition

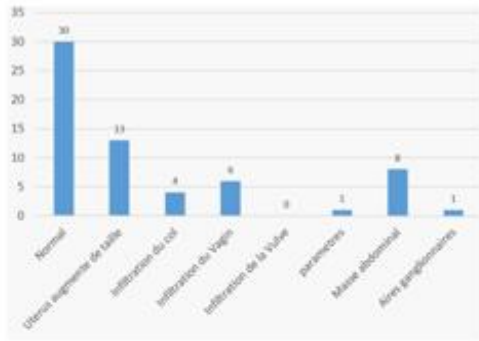


Figure 7: Clinical signs found

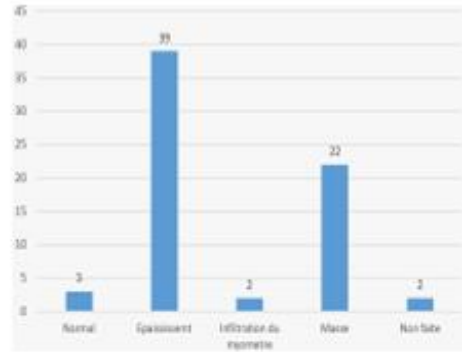


Figure 8 : Ultrasound signs

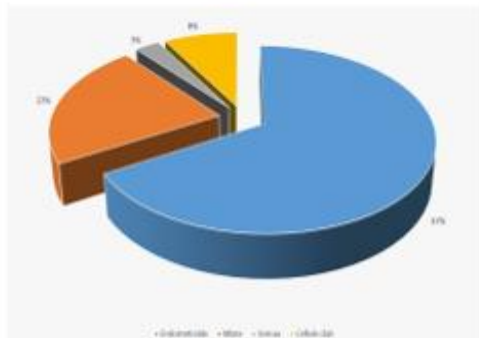


Figure 9: Histological types in our series



Figure 10 : concordance of radiosurgical classification

| | IA | IB | II | IIIA | total |
|-------|-------|-------|-------|-------|-------|
| IA | 28,6% | 42,9% | 7,1% | 21,4% | 14 |
| IB | 11,1% | 44,4% | 33,3% | 11,1% | 9 |
| II | 0,0% | 40,0% | 60,0% | 0,0% | 5 |
| IIIA | 0,0% | 85,7% | 14,3% | 0,0% | 7 |
| total | 14,3% | 51,4% | 22,9% | 11,4% | 35 |

Figure 11: FIGO staging on definitive histology

| Pipelle(21) | | biopsie dirige(30) | |
|-------------|-----------|--------------------|-----------|
| Upgrade | Downgrade | Upgrade | Downgrade |
| 3(14,28%) | 4(19%) | 3(10%) | 6(20%) |

Figure 12 : Concordance between pre- and postoperative grades

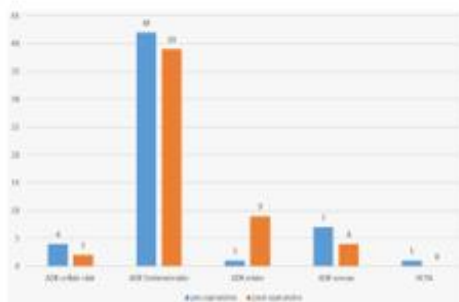


Figure 13: Concordance between preoperative and postoperative histological types

DISCUSSION

Average age at onset of endometrial neo in our Serie: 59 years, the results obtained are confirmed by other similar studies [1], a meta-analysis of 16 studies [2] shows that obesity is a major risk factor through various mechanisms followed by disastrous factors. Pelvic

ultrasound, using a simple measurement of endometrial thickness, can reliably discriminate between women at risk of endometrial cancer [3-4]. hysteroscopy is the gold standard for positive diagnosis of endometrial cancer [5], MRI can be used to staging the tumor on MRI, and thus plan surgery and even neoadjuvant treatment in the case of advanced endometrial cancer [6]. Hysteroscopy is

often used to direct biopsies, as in our case (77%). The most frequent histological type was endometrioid adenocarcinoma, followed by other types. In our series, 67% was endometrioid adenocarcinoma.

the management of endometrial cancer depends on several parameters: TNM classification, histological type, care and operability of patients all these criteria classify patients into 3 preoperative risk groups: low-risk, intermediate-risk and high-risk but this classification can be changed postoperatively given the discordance found in endometrial cancer in several parameters, for example In our series, the TNM classification was concordant in 49% of pre- and postoperative cases, in addition to changes in histological type and grade :we had a percentage of 14,28% of Upgrade contrary to 19% of Down grade in a group where the histological type is obtained by pipelle of cornier , et we had an upgrade of 10% and Downgrade of 20% in the group where the histological type made by a directed biopsy , Larson et al found an underestimation of grade and therefore risk in 21%, whereas the Frumovitz study found 27% [7].

under- or over-estimation of tumor risk is responsible for either default or over-treatment, hence the interest of the new European classifications[8]: note the change in grade: which is now described as low grade (formerly grade 1-2) or high grade (formerly grade 3), histological types are now grouped as endometrioid or non-endometrioid without forgetting the molecular classification (POLEmut tumors , p53abn tumors MMRd and NSMP tumors) which has classified 4 risk groups will be used to adapt the initial surgical treatment and also the adjuvant treatment. The molecular characterization of endometrial cancer and its clinical relevance is a rapidly evolving field, and changes may continue to occur based on the data received.

The results of our series are in line with the literature concerning the discrepancy between TNM classification, histological type and grade of endometrial cancer pre- and postoperatively, which sometimes results in patients being under- or over-treated. But the new European recommendations insist on the generalization of MSI or immunohistochemical analysis of MMR system proteins for all patients, and also the classification into 4 prognostic risk groups integrating molecular analysis data (p53, MLH1, PMS2, MSH6,

MSH2, POLE), can further improve initial surgical management as well as adjuvant treatment modalities.

CONCLUSIONS

In endometrial cancer, there are discrepancies between preoperative and postoperative status, but the new recommendations and molecular classification may lead to improvements, especially with the new TNM 2023 classification, pending the results of other studies currently underway, especially the SENECA study.

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