

Hysteroscopic Assessment of Menopausal Patients with Breast Cancer Taking Tamoxifene

J.RAHMOUNI, J.ABBOU, K.SAoud, S.ERRARHAY, N.MAMOUNI, C.BOUCHIKHI, A.BANANI

Service de gynécologie obstétrique 1 CHU HASSAN II

Abstract: *Tamoxifen estrogenic action in the uterus induces several uterine diseases, benign and/or malignant ones. Using hysteroscopy we were able to demonstrate that women receiving tamoxifen experienced some sort of adverse endometrial effects. The present study investigated the contribution of hysteroscopy in endometrial surveillance, on women treated with tamoxifen, for breast cancer. We sought to evaluate the effectiveness of hysteroscopy in the detection of endometrial neoplasia associated with tamoxifen. we identified fifty eight postmenopausal breast cancer patients taking tamoxifen underwent hysteroscopy due to thick endometrium or other ultrasound abnormalities or alarming gynecologic symptoms.*

Keywords: *breast cancer; hysteroscopy; tamoxifene*

1-Introduction

Breast cancer is the most common cancer among women, and a major cause of death.

The cancer death rate has declined in recent decades thanks to increased screening and the progress of adjuvant therapy.

The randomized clinical trials have demonstrated survival benefits associated with the use of adjuvant therapies. Tamoxifen can be considered one of the most effective adjuvant therapies against breast cancer. Furthermore, Tamoxifen appears to improve the patient's prognosis.

Tumors expressing estrogen receptors and / or progesterone receptors are generally well differentiated with a low mitotic index and therefore, a good prognosis

In 75 to 80% of patients with early-onset breast cancer who are estrogen receptor positive and treated with 5 years of tamoxifen

Expectantly reduces local, contralateral and distant recurrence of neoplasia and decreases over 15 years breast cancer death rate.

Thus, concluding that tumors with high or uncertain hormonal response should be treated with hormone therapy.

2-Materials and Methods:

Overall, the database included 58 women, aged between 35 and 82, treated with tamoxifen for breast cancer from 2018 to 2021

All patients were regularly followed endometrially by ultrasound, and were further classified in asymptomatic or symptomatic groups considering whether uterine bleeding was absent or present.

The hysteroscopy was proposed to women with ultrasonographic abnormalities and/or with uterine bleeding to patients at high risk for endometrial cancer.

The reasons for the hysteroscopy were bleeding discovered by endometrial thickening on ultrasound surveillance or an intracavitary image on imaging

3-Results :

The present study involved 58 women who received tamoxifen as an adjuvant treatment for breast cancer. All patients benefited from an ultrasound, and hysteroscopy was performed for any patient with an ultrasound abnormality

We collected the following data on each patient:

age, parity, hormonal status (pre-menopause, perimenopause and post-menopausal)

In our study, the reason for performing the hysteroscopy was 54% due to the discovery of endometrial thickening on ultrasound, 38% for postmenopausal bleeding, 7% for suspicious image on ultrasound and 1% for pelvic pain associated with bleeding.

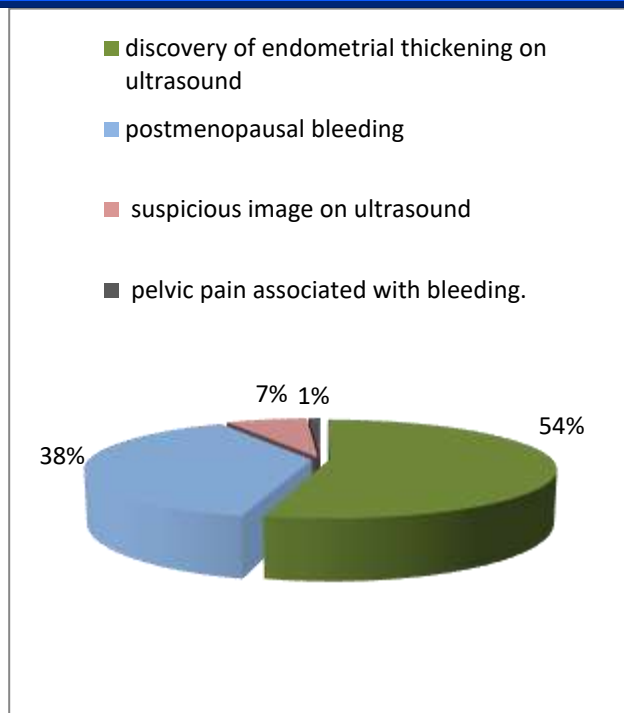


Figure 1: indications of hysteroscopy

hypertrophy was found in 36% of patients, 28% presented with endometrial atrophy, while 22% it was a polyp, 10% uterine synechia and in 4% other lesions

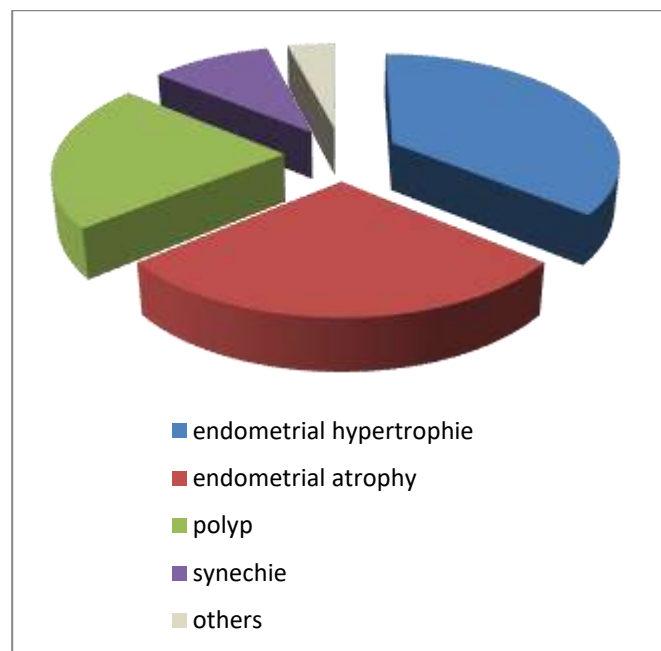


figure2 : results of hysteroscopy

patients with polyps received resection, while patients with hypertrophy and atrophy received biopsy of the endometrium



Figure 3 : hysteroscopic image of endometrial hypertrophy

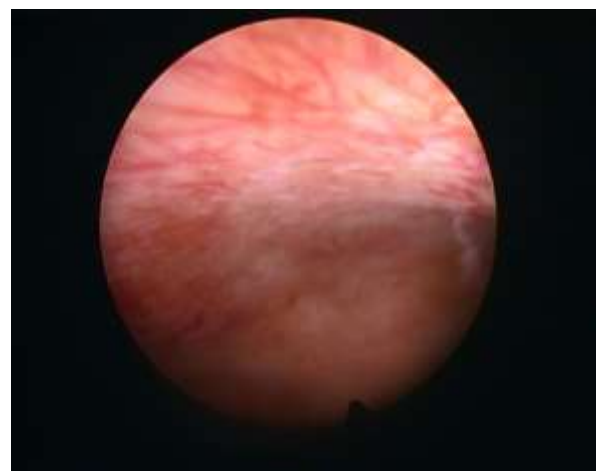


Figure 4 :hysteroscopic image of endometrial atrophy

patients with suspected hypertrophy on ultrasound underwent hysteroscopy: Only 15% who had hypertrophy, 15% had a polyp and 33% a normal uterine cavity 26% atrophy while 7% of synechiae and 4% of lesions suggestive of adenomyosis

all these patients underwent a biopsy curtage of the endometrium, one of which led to the discovery of an adenocarcinoma

4- Discussion .

Altogether, Tamoxifen is a nonsteroidal selective estrogen receptor modulator which is primarily used for the adjuvant treatment of estrogen receptor positive breast cancer in premenopausal women and in some postmenopausal women.

Tamoxifen estrogenic action in the uterus induces several uterine diseases, benign and/or malignant ones. It is mainly linked with the doses and the length of the treatment.

Tamoxifen is associated with increased risks of uterine pathology, including endometrial polyps, endometrial carcinoma, hyperplasia, uterine sarcoma, and uterine carcinosarcoma. The risk of endometrial adenocarcinoma is multiplied by two to three in post-menopausal women.

In view of the estrogenic effects on the endometrium, it is necessary to screen postmenopausal patients taking tamoxifen, especially those without gynecological symptoms.

In case of symptoms, anomalies in the cervico-vaginal smears, intra-uterine liquid retention with a stenosed cervix, or suspicious endometrial thickness, then an endometrial sampling must be carried out.

However, in all these cases, the action of tamoxifen might be the stimulation of pre-existing endometrial injury offer all patients on tamoxifen treatment a regular uterine assessment cavity.

The occurrence of endometrial cancer in patients treated with Tamoxifen for breast cancer has already been reported by several author, in our study we report the development of an adenocarcinoma in only one out of 58 patients

In our experience, hysteroscopy has played an important role in the monitoring, confirmation or elimination of endometrial cancers.

In conclusion, hysteroscopy could play a fundamental role in determining the endometrial state of patients on tamoxifen with a better sensitivity that exceeds that of ultrasound

It is important to inform patients about the additional risks of developing an endometrial cancer because of tamoxifen, while still being reassuring.

Besides, it is absolutely necessary to recommend them to take quickly medical advice in case of gynecologic symptoms.

5-References

1-Carlo Saccardi, Salvatore Gizzo, Tito Silvio Patrelli, Emanuele Ancona, Omar Anis, Stefania Di Gangi, Antonio Vacilotto, Donato D'Antona and Giovanni Battista Nardelli Endometrial surveillance in tamoxifen users: role, timing and accuracy of hysteroscopic

investigation: observational longitudinal cohort study Endocrine-Related Cancer (2013) 20, 455–462

2- Patrick Neven, Xavier De Muylder, Yves Van Belle, Guido Vanderick and Edgard De Muylder , Hysteroscopic follow-up during Tamoxifen

Treatment European Journal of Obstetrics & Gynecology and Reproductive Biology, 35 (1990) 235-238

3- Hyuk Jung, Joo Kyoung Jung, Sat Byul Kim, Eun A Cho, and Mi Jung Um

Comparative Study on Hysteroscopic and Histologic Examinations of the Endometrium in Postmenopausal Women Taking Tamoxifen

JMM 2018 Aug 31

4- C. Lhomme a *, P. Pautier a , L. Zagame a , S. Taieb b , P. Descamps c , S. Delalogue a , P. Morice a , P. Petrow a , P. Duvillard Surveillance de l'endomètre des femmes sous tamoxifène ELSEVIER Vol 31 - N° 7-8 - juillet 2003

P. 579-693

5-Carlo Saccardi 1, Salvatore Gizzo, Tito Silvio Patrelli, Emanuele Ancona, Omar Anis, Stefania Di Gangi, Antonio Vacilotto, Donato D'Antona, Giovanni Battista Nardelli Endometrial surveillance in tamoxifen users: role, timing and accuracy of hysteroscopic investigation: observational longitudinal cohort study Endocr Relat Cancer

. 2013 Jun 24;20(4):455-62.