

Impact of Castration on the Sexual Life in Young Women at the National Institute of Oncology of Rabat, Morocco

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Abstract:- **Introduction:** Castration, also referred to as hormonal suppression, is generally understood as the halt of hormone production by the ovaries in premenopausal women. This can occur through medical means, such as the administration of LH-RH agonists or antagonists that act reversibly on the hypothalamic-pituitary axis, or through surgical or radical methods that permanently eliminate hormonal production. Castration is primarily recommended for premenopausal women with hormone receptor-positive breast cancer. Regardless of the approach used, it produces side effects akin to those experienced during menopause, including hot flashes, anxiety, depressive disorders, and trophic changes that may affect sexual function. Thus, our study seeks to investigate the effects of castration on sexual life in our patients undergoing treatment for hormone receptor-positive breast cancer. **Materials and Methods:** This study was carried out at a day hospital to assess the effects of mainly medical, but also surgical and radical castration on couple dynamics in 50 patients, averaging 40 years of age, who are being treated for hormone receptor-positive breast cancer, regardless of whether it is localized or metastatic. **Results:** The majority of patients report experiencing side effects associated with castration, especially hot flashes, which affect nearly all patients, as well as depressive and anxiety disorders. However, it remains challenging to determine whether these issues are directly linked to the disease or its treatment. Additionally, many patients face sexual disturbances, including decreased libido and vaginal dryness, which significantly impact couple dynamics in almost 50% of cases. **Conclusion:** Investigating the effects of castration on sexuality, particularly regarding couple dynamics, highlights a significant yet sensitive topic. This issue, often considered taboo, represents a major side effect of prolonged treatment in long-term survivors. Therefore, it is essential to engage in regular discussions and collaborate with specialists, especially sexologists, to enhance tolerance and achieve lasting improvements in quality of life.

Keywords:- Castration, Breast Cancer, Young Woman, Impact on Couple Life.

I. INTRODUCTION

Castration, or hormonal suppression, is commonly defined as the cessation of hormone production by the ovaries in premenopausal women. It can be either medical, through the injection of LH-RH agonists or antagonists acting reversibly on the hypothalamic-pituitary axis, or surgical or even radiation-induced, definitively ceasing hormone production. Mainly indicated in hormone receptor positive breast cancer in premenopausal women, castration, regardless of its mechanism, induces side effects similar to menopausal symptoms, namely hot flashes, anxiety and depressive disorders, and trophic disorders likely affecting sexuality. Therefore, our study aims to explore this impact on the sexual life of our patients who underwent castration as part of their hormone receptor-positive breast cancer treatment.

II. POPULATION AND METHODS

➤ Study Design:

We conducted a descriptive cross-sectional study, at the Day Hospital of the National Institute of Oncology in Rabat, on a non-probabilistic convenience sample comprising 50 patients.

➤ Inclusion Criteria:

We included patients followed for hormone receptor-positive breast cancer, premenopausal, localized or metastatic disease, undergoing castration (medical, radiation-induced, surgical) and engaged in sexual activity.

➤ Data Sources:

We collected data using a pre-established questionnaire, which included several validated measurement tools regarding sexual function, relationship satisfaction, menopause symptoms and overall quality of life.

Demographic details included patient's age, previous breast surgery, current or previous hormonal treatment, duration of castration, after obtaining patient consent.

III. RESULTS

The descriptive and analytic treatment of our patients data allowed sorting several variables that permitted to reach the aim of our study.

A. Socio-Demographic Characteristics:

➤ Age :

The average age was 40 years (ranging from 27 to 54 years)

➤ Marital Status – Pregnancies :

96% of women are married, and the average duration of marriage was 13 years. Women of our serie have given birth to 3 children averagely, and desire for pregnancy remained in 12% of women.

B. Clinical Data

➤ Disease stage

In our case series, at the time of the study, 62% of the patients were at the metastatic stage of their disease, while 38% were at an early stage, receiving adjuvant treatment

C. Therapeutic data

➤ Cancer Treatment :

All our patients have undergone hormonal treatment, a proportion of 76% has had a surgical intervention, 68% and 64% respectively has received chemotherapy and radiation.

➤ Castration Method and Duration:

The average duration of castration in our women was 20 months (ranging from 2 months to 4 years), and in 100% it was medical, none of our patients has had a surgical or radiation castration.

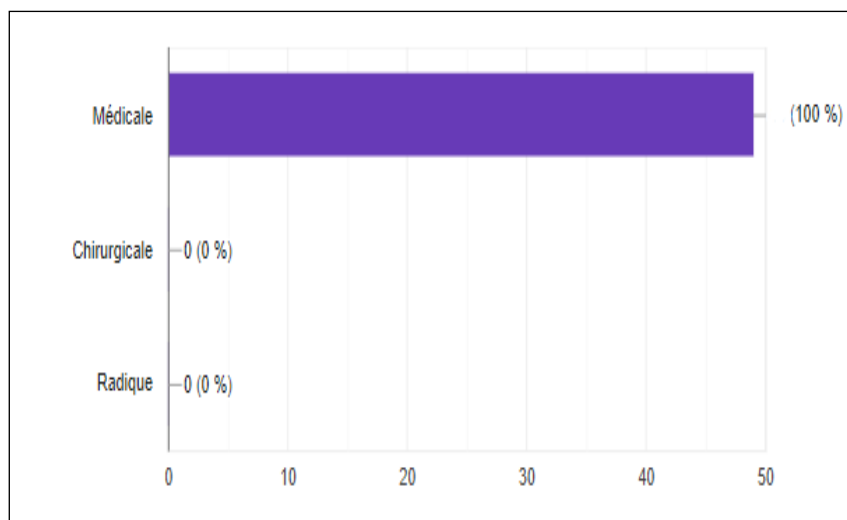


Fig 1: Castration Method

D. Impact on Couples:

➤ Sexual Side Effects:

All the patients reported experiencing hot flashes, either continuous or intermittent. Almost all of them suffer from anxiety and vaginal dryness, along with decreased libido and significant fatigue. Other side effects were reported at a lower percentage, such as dissatisfaction with body image, new difficulties with partners, pain and discomfort during intercourse, and, in some cases, depression.

➤ Sexual Impact :

Quantitatively, a decrease in the frequency of sexual intercourse was noted in more than half of the cases, specifically in 61% of patients. In 12% of cases, there was a complete cessation of intercourse, while in 14% of cases, no impact on sexual acts was reported.

Qualitatively, sexual encounters became more complicated in 58% of cases and less spontaneous in 79%, while about a quarter of patients reported a positive impact with increased affection, attention, and tenderness.

➤ Impact on couple life :

In our case serie, two cases of divorce were reported, and disputes arose in 26% of the cases; however, approximately 66% of the patients reported no impact of cancer treatment on their marital life.

E. Treatment continuation:

After all the above results, none of our patients has claimed treatment interruption despite the side effects reported on several levels.

IV. DISCUSSION

The vast majority of patients reported experiencing castration-related side effects, particularly hot flashes in almost all patients, depressive and anxiety disorders, without being able to distinguish between a causal link with the disease itself or its therapeutic origin. More discreetly but significantly impacting the majority of patients, sexual problems such as decreased libido and vaginal dryness were observed, significantly affecting the couple's life in almost 50% of cases. That is what several literature studies report.

We report a first study describing women's sexual functioning in the early weeks of breast cancer treatment by using quantitative and qualitative data [1].

The results showed that women during this period may follow different patterns of sexual behavior: more than three-quarters of the women who were sexually active before the beginning of treatment reported significant sexual changes or even cessation of any sexual activity with their partner. This result is in line with results of previous studies [2,3].

At the same time, and this same study showed that most women (64.5%) stayed sexually active despite the recent treatment, a proportion comparable with the 67% and the 65% reported in previous studies [4,5].

This result showed that cessation of sexual activity is not inevitable even in the immediate post-treatment period. A series of qualitative changes are also experienced, such as intercourse being more complicated because gestures are less spontaneous, movements being more difficult because of physical discomfort, women being reluctant to show themselves nude, etc.

Moreover, positive qualitative changes also occur: a growing tenderness, hugging, and a desire to comfort and to be more attentive to the other's needs.[1]

In the other hand, and comparing to what had been notices in our study, creating tenderness can somehow replace sexuality in women with sexuality issues induces by hormonal suppression, allowing them to maintain intimacy with their partner [2,6,7].

The role of this growing tenderness in the future evolution of sexuality requires further investigation. We suggest two possible outcomes, tenderness could serve as a protective factor for the couple's relationship, facilitating the resumption of sexual activity in the future as it could indicate a more profound and lasting change in the couple's relationship. Numerous psycho-educational interventions have demonstrated effectiveness in assisting breast cancer survivors with sexuality and intimacy challenges.

Successful approaches have encompassed both individual and couple-based therapies that prioritize enhancing communication, fostering coping skills, and helping couples navigate potential intimacy concerns.[8]

V. CONCLUSION

Studying the impact of castration on sexuality, particularly on the couple's life, raises a significant albeit delicate issue, as it is a taboo subject but represents a major side effect of a treatment maintained for longer periods in long-living patients. Hence, there is a necessity to discuss it regularly and collaborate with specialists, especially sexologists, for better tolerance and sustainable improvement in the quality of life.

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