

Uterine Metastasis of Breast Lobular Carcinoma: A Case Report

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1. Abstract

Breast cancer is the most common cancer in women, and its prognosis depends largely on the existence of metastases. Liver, skeletal and lung metastases are the most common sites, while genital metastases appear to be rarer and less well known. The discovery of a tumour in the uterus in a woman with a history of breast cancer raises the question of its primary or secondary origin. Their diagnosis is often delayed. In this article, we report the case of a patient presenting with a uterine metastasis from breast cancer treated three years previously. This provides an opportunity to clarify the importance of regular, accurate genital examinations in the surveillance of breast cancers and to discuss the factors that predict their occurrence.

2. Introduction

Breast cancer is the most common cancer in women, and its prognosis largely depends on the existence of metastases. Liver, skeletal and lung metastases are the most common sites, while uterine, cervical and corporal metastases are even rarer and less well known [1]. Invasive lobular carcinoma (ILC) of the breast accounts for 5-15% of breast cancers [2,3], It is the second most common histological type, after non-specific infiltrating cancer (NSCLC). Its incidence is rising sharply [4]. Tamoxifen-based hormonal treatment has an oestrogenic effect on the endometrium, which is responsible for endometrial proliferation. Its metastatic role has not been demonstrated in the literature [1,5].

3. Observation

Mrs C. Z, aged 54, 5G5P, in 2019 she presented with an enlarged left breast with inflammatory signs, an echo-mammogram was classified as ACR BIRADS 5. A percutaneous biopsy was performed showing invasive lobular carcinoma; grade SBR 2, luminal B, HER2 enriched with 60% ki67. The examination was completed by breast MRI, which revealed a 22mm lesion in the left QSE with spiculated contours that enhanced after injection of

gadolinium, associated with thickening of the skin and the nipple-areolar plate with the presence of a 15mm homolateral axillary adenopathy and no suspicious lesion in the right breast. The patient underwent a thoracic-abdominal-pelvic CT scan and a bone scan, both of which came back without any abnormalities. She was then referred to the oncology centre where she received 06 courses of neoadjuvant chemotherapy, the last course in. She then underwent a left mastectomy associated with a homolateral axillary curage. The histological study found tumour residue of an infiltrating lobular carcinoma with healthy margins, absence of TILS and vascular emboli, with 24 metastatic lymph nodes out of 25 nodes sampled. Locoregional radiotherapy was administered and she was put on Tamoxifen-based hormone therapy. In June 2022, the patient consulted a specialist for breakthrough bleeding, the clinical examination revealed an inflamed cervix, the vaginal examination revealed a normal sized uterus and the rectal examination revealed free parameters. Une Pelvic ultrasound revealed a uterus measuring 102x48x46mm with regular contours and a homogeneous echostructure, with a slight regular and homogeneous thickening of the endometrium measuring 10mm with a thin hydrometric slide (FIGURE1). The cervical-uterine smear was highly inflammatory and eutrophic for its age, with a few reactive cellular changes with no sign of neoplasia. In August 2022, the patient underwent endometrial biopsy, the results of which showed a histological and immunohistochemical appearance compatible with lobular mammary carcinoma (presence of intense and diffuse oestrogen and progesterone receptor positivity) with polyclonal cytokeratin 7 positivity. A pelvic MRI was carried out for staging, revealing endometrial thickening more marked at the uterine fundus, with blurred contours in the junctional zone and less than 50% of the myometrium classified 2. The patient was referred to the RCP, which led to the decision to perform a hysterectomy without adnexal preservation.



Figure: ultrasound image of a sagittal section of the uterus showing endometrial thickening.

4. Discussion

Genital tract metastases are rare. Ovarian metastases are the most common, reported in the literature with a frequency varying between 20 and 30% of cases [6,7], and uterine metastases between 1 and 15% of cases [7]. Uterine metastases from breast cancer are often due to lobular carcinoma, which tends to be multifocal, multicentric and bilateral [8,1]. The sensitivity of ultrasound in detecting CLI varies between 68% and 98% [9]. Ultrasound is superior to mammography in detecting multicentricity and multifocality, with a sensitivity of around 21% in Selinko's series [10]. MRI has established itself as the essential examination for assessing local extension of CLI [11]. The originality of CLI lies in its metastatic spread. According to Chann et al, CLI can spread to unusual sites: peritoneum, retroperitoneum and hollow viscera. Overall, CLI is characterised by diffuse infiltration of these organs, similar to lymphomas. These particular localisations are seen late and may go unnoticed clinically [12]. CLI is a hormone-sensitive tumour. In the literature, more than 90% of CLI are hormone receptor positive, whereas only 5-14% of CLI are clinically HER-2 positive [13]. The literature [1,5] reports cases of uterine metastases revealing unrecognised breast cancer, which makes diagnosis even more difficult, especially when the breast cancer is subclinical. The predominance of the lobular type is clearly demonstrated in the literature, but the prognostic value of these metastases remains debated, as they are frequently associated with other secondary localisations.

5. Conclusion

CLI is a particular and rare variety of breast cancer, characterised by a tendency to be multifocal, multicentric and bilateral. CLI metastases are most often digestive or ovarian. Uterine metastases are rare, and a routine gynaecological examination should be carried out in all patients with breast cancer.

References

1. Chabbert-Buffet N, Seroussi B, Chopier J, Fajac A, Antoine M, Boucher C, et al. Modalities for the functioning of a Care Center for women at high risk for breast and ovarian cancers: the French experience of Tenon Hospital. *Gynécologie Obstétrique & Fertilité*. 2010; 38(3): 183-192.
2. Ravdin PM. Hormone replacement therapy and the increase in the incidence of invasive lobular cancer. *Breast disease*. 2008-2009; 30:3-8.
3. Li CI, Anderson BO, Daling JR, Moe RE. Trends in incidence rates of invasive lobular and ductal breast carcinoma. *JAMA*. 2003; 289(11): 1421-4.
4. Lopez JK, Bassett LW. Invasive lobular carcinoma of the breast: spectrum of mammographic, US and MR imaging findings. *Radiographics*. 2009; 29(1): 165-76.
5. Tsai-Fang L, Yeou-Lih W, Tien-Shan W, Chih-Ping C. Incidental detection of metastatic lobular breast carcinoma in the female internal genital organs 2 years following modified radical mastectomy. *J Obstet Gynecol* 2005; 44: 368-71.
6. Afriat R, Lenain H, Vuagnat C, Michenet P, Luthier F, Maitre F, Grossetti D. Metastasis of breast cancer to a uterine leiomyoma.
7. Roses DF, Breast Cancer, 2nd ed., Elsevier, Pennsylvania, 2005, p.812, *Journal of Surgical Education* 64 (3) 189. 2007.
8. Lisa N, Abaid MD, MP HaJessica M.Rhee MDaVeronicaRausei - Mills MD bJohnLim MDc Alice M.PoliceMDdBram H.Goldstein-PhDa. »Metastatic Lobular Breast Carcinoma Infiltrating a Uterine Leiomyoma. *J Gynecol Obstet Biol Reprod (Paris)*. 1993; 22(3): 243-4.
9. Butler RS, Venta LA, Wiley EL, Ellis RL, Dempsey PJ, Rubin E. Sonographic evaluation of infiltrating lobular carcinoma. *Am J Roentgenol*. 1999; 172(2): 325-30.

10. Selinko VL, Middleton LP, Dempsey PJ. Role of sonography in diagnosing and staging invasive lobular carcinoma. *J Clin Ultrasound*. 2004; 32(7): 323–32.
11. Suissa M, Lévy L, Tranbaloc P, Chiche JF, Martin B, Skaane P, et al. Imagerie des cancers lobulaires infiltrants. *Imag Femme*. 2005; 15: 129–39.
12. Chan A, Pintilie M, Vallis K, Girourd C, Goss P. Breast cancer in women ≤ 35 years: review of 1002 cases from a single institution. *Ann Oncol*. 2000; 11(10): 1255–62.
13. Yu J, Bhargava R, Dabbs DJ. Invasive lobular carcinoma with extracellular mucin production and HER-2 over expression: a case report and further case studies. *Diagn Pathol*. 2010; 5: 36.