

- metastases from breast cancer? *Ann Surg.* 2006;244:897–908, <http://dx.doi.org/10.1097/01.sla.0000246847.02058.1b>.
5. Golse N, Adam R. Liver metastases from breast cancer: What role for surgery? Indications and results. *Clin Breast Cancer.* 2017;17:256–65, <http://dx.doi.org/10.1016/j.clbc.2016.12.012>.
 6. Cardoso F, Paluch-Shimon S, Senkus, Curugliano G, Aapro M, André F, et al. 5th ESO-ESMO international consensus guidelines for advanced breast cancer (ABC 5). *Ann Oncol.* 2020, <http://dx.doi.org/10.1016/j.annonc.2020.09.010>.
 7. Ruiz A, Castro-Benitez C, Sebahg M, Giacchetti S, Castro-Santa E, Wicherts A, et al. Repeat hepatectomy for breast cancer liver metastases. *Ann Surg Oncol.* 2015;22 Suppl 3:S1057–66, <http://dx.doi.org/10.1245/s10434-015-4785-8>.
 8. Bacalbaa N, Balescu I, Dima S, Popescu I. The role of resection for breast cancer liver metastases-a single center experience. *Anticancer Res.* 2015;35:6877–80.
 9. Mariani P, Servois V, De Rycke Y, Bennett S, Feron J, Almubarak M, et al. Liver metastases from breast cancer: Surgical resection or not? A case-matched control study in highly selected patients. *Eur J Surg Oncol.* 2013;39:1377–83, <http://dx.doi.org/10.1016/j.ejso.2013.09.021>.
 10. Ruiz A, van Hillegersberg R, Siesling S, Castro-Benitez C, Sebahg M, Wicherts D, et al. Surgical resection versus systemic therapy for breast cancer liver metastases: Results of a European case matched comparison. *Eur J Cancer.* 2018;95:1–10, <http://dx.doi.org/10.1016/j.ejca.2018.02.024>.
 11. Sundén M, Hermansson C, Taflin H, Andersson A, Sund M, Hemmingsson O. Surgical treatment of breast cancer liver metastases-A nationwide registry-based case control study. *Eur J Surg Oncol.* 2020;46:1006–12, <http://dx.doi.org/10.1016/j.ejso.2020.02.008>.
 12. Feng Y, He XG, Zhou CM, Zhang QY, Huang SY, Li Z, et al. Comparison of hepatic resection and systemic treatment of breast cancer liver metastases: A propensity score matching study. *Am J Surg.* 2020;220:945–51, <http://dx.doi.org/10.1016/j.amjsurg.2020.02.047>.
 13. Chun Y, Mizuno T, Cloyd J, Jin Ha M, Omichi K, Tzeng C, et al. Hepatic resection for breast cancer liver metastases: Impact of intrinsic subtypes. *Eur J Surg Oncol.* 2020;46:1588–95, <http://dx.doi.org/10.1016/j.ejso.2020.03.214>.
 14. Wen J, Ye F, Xie F, Liu D, Huang L, Fang C, et al. The role of surgical intervention for isolated breast cancer liver metastasis: Results of case-control study with comparison to medical treatment. *Cancer Med.* 2020;9:4656–66, <http://dx.doi.org/10.1002/cam4.3117>.
 15. Cheung T, Chok K, Chan A, Tsang S, Dai W, Tau T, et al. Survival analysis of breast cancer liver metastasis treated by hepatectomy: A propensity score analysis for Chinese women in Hong Kong. *Hepatobiliary Pancreat Dis Int.* 2019;18:452–7, <http://dx.doi.org/10.1016/j.hbpd.2019.08.001>.
 16. Ruiz A, Sebahg M, Wicherts D, Castro-Benitez C, Hillegersberg R, Paule B, et al. Long-term survival and cure model following liver resection for breast cancer metastases. *Breast Cancer Res Treat.* 2018;170:89–100, <http://dx.doi.org/10.1007/s10549-018-4714-1>.
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Pathology of breast lesions in female transgender



Patología de las lesiones mamarias en las mujeres transgénero

Dear Editor,

In relation to the article presented by Tresserra et al.,¹ the social and legislative changes that have occurred in recent years regarding sexual diversity, together with the greater availability of specialized health care, have increased visibility, social openness and request for gender confirmation treatments.

Regarding breast surgery, it has led to a notable increase in the number of users at an ever younger age. As surgeons dedicated to the treatment of the breast, since we began breast surgery in gender diversity, we have been especially concerned about the potential risk of breast cancer in transsexual women due to prolonged exposure to hormonal treatment to which individual and hereditary risk factors are added.

Most transsexual women start feminizing treatment one or two years before breast surgery, however the majority of current evidence suggests that neither type nor dosage of estrogen has an effect on final breast size.² Furthermore, there is no evidence on these histological and mammographic differences result in clinically significant breast size differences. Some authors suggest that age at de beginning, body mass index and breast individual sensitivity to hormones can influence on final size breast, but there are no evidence based.

The main goal in the next few years would be define witch type of treatment or treatments and at which doses might optimize breast development. When we refer to development, we mean volume incresase. From the histological perspective, it would be better for the trans breast not to acquire female modifications, thus avoiding or reducing the risk of breast pathology typical of cis women.

Although to date no increased risk has been shown compared to cisgender men with estrogen treatment. There are no studies that inform us of the risk in combined treatments (estrogens-progestogens). Some authors point out that it is probably not necessary to undertake population screening in transgender people.³ However, the WPATH and different

authors⁴⁻⁶ insist on the recommendation of follow-up, but without a basis that supports how it should be organized, its frequency or its beginning age.

Perhaps the selection of screening and diagnostic method should be tailored depending on clearly defined risk factors and mode of breast construction.⁴

For this reason, it seems to us a priority to educate transsexual women on the need for follow-up, as well as to initiate extensive prospective studies that help us determine when the follow-up should begin, who requires it, how often and what would be the ideal imaging method.

The rest of the commented pathological findings other than breast cancer due to their low frequency and exceptional nature do not deserve a particular search/screening. Just highlight that many of them like myofibroblastoma or adenomyoepithelioma can be detected by conventional radiological methods.

Finally, the suspicion of anaplastic large cell lymphoma (ALCL) associated with implants should not be neglected, whose debut symptom is usually breast inflammation with volume increase and the presence of periprosthetic fluid. Surgeons dedicated to breast surgery in trans women should consider the need for maintained follow-up, both for breast pathologies and for cosmetic and other complications owing to the use of implants.⁷

Conflicts of interest

The authors have no conflicts of interest to declare.

Bibliografía

1. Tresserra Casas F, Martínez-Lanao MA, Fernández-Acevedo M, Ara Pérez C, Lorenzo Browne J, Fábregas Xaurado R. Pathology of breast lesions in female transgender. *Rev Senol Patol Mamar*. 2020;33:151-6.
2. Wierckx K, Gooren L, T'Sjoen G. Clinical review: breast development in trans women receiving cross-sex hormones. *J Sex Med*. 2014;11:1240-7.
3. Gooren LJ, T'Sjoen G. Endocrine treatment of aging transgender people. *Rev Endocr Metab Disord*. 2018;19:253-62, <http://dx.doi.org/10.1007/s11154-018-9449-0>. PMID: 29922963.
4. Maglione KD, Margolies L, Jaffer S, Szabo J, Schmidt H, Weltz C, et al. Breast cancer in male-to-female transsexuals: use of breast imaging for detection. *Am J Roentgenol*. 2014;203:W735-40, <http://dx.doi.org/10.2214/AJR.14.12723>.
5. Braun H, Nash R, Tangpricha V, Brockman J, Ward K, Goodman M. Cancer in transgender people: evidence and methodological considerations. *Epidemiol Rev*. 2017;39:93-107, <http://dx.doi.org/10.1093/epirev/mxw003>.
6. WPATH (2012). Standards of care for the health of transsexual, transgender and gender nonconforming people. World Professional Association for transgender health.
7. Clemens MW, DeCoster RC, Fairchild B, Bessonov AA. Fabio Santanelli di Pompeo Finding consensus after two decades of breast implant-associated anaplastic large cell lymphoma. *Semin Plast Surg*. 2019;33:270-8.

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