



Galactorrhea after augmentation mastoplasty

Galactorreia após mastoplastia de aumento

JEFFERSON LESSA SOARES DE
MACEDO ¹

SIMONE CORRÊA ROSA ^{1*}

LUCIANA ANSANELI NAVES ¹

LUIZ AUGUSTO CASULARI ROXO DA
MOTTA ¹

Dear Editor,

We commend the authors of the article entitled, “Galactorrhea: how to approach this uncommon complication after augmentation mastoplasty,” published in the latest issue of *Brazilian Journal of Plastic Surgery*. The work stands out for highlighting an endocrine problem that may occur after augmentation mastoplasty.

Galactorrhea may or may not be associated with hyperprolactinemia¹⁻³. Prolactin has, besides its role in lactogenesis, and osmoregulatory and immunological functions such as modulation of T-lymphocytes and macrophages. Its proper regulation may interfere with the postoperative healing process^{4,5}.

Hyperprolactinemia has physiological, pathological, and pharmacological causes such as pregnancy, breastfeeding, estrogen therapy, exercise, psychological stress, and medications that interfere with dopaminergic tone such as antihistamines, antihypertensives, and anticonvulsants, as well as primary hypothyroidism and pituitary adenomas.

One of the most important stimuli for secretion of prolactin in patients with galactorrhea after augmentation mammoplasty is nipple stimulus by abrupt distension and compression. Thus, the irritation or chest wall injury due to burn, herpes zoster, and intercostal nerve injury also has a similar mechanism. Furthermore, it rules out pregnancy, breastfeeding, and galactocele, as suggested in the algorithm of the article.

As previously mentioned, the prolactin dosage is essential because it plays a key role in the adequacy of the therapeutic response to the dopamine agonist and in the investigation of diseases associated with hyperprolactinemia. The dosage of the thyroid-stimulating hormone for diagnosis of hypothyroidism and magnetic resonance imaging of sella turcica may be necessary.

The surgeon should be aware of the factors that increase the risk of infection of the implant, such as periareolar incision and collection of galactocele around the implant. The combination of these risk factors in patients with high prolactin levels increases the need for use of dopamine agonists such as cabergoline^{1,3}.

After endocrine and imaging assessments of normal breasts in patients with normal serum prolactin concentrations who display galactorrhea after mammoplasty augmentation, galactorrhea may be considered physiological and transient because of excessive stimulation

Institution: Universidade de
Brasília, DF, Brazil.

Article received: August 6, 2016.
Article accepted: October 30, 2016.

Conflicts of interest: none.

DOI: 10.5935/2177-1235.2017RBCP0024

¹ Universidade de Brasília, DF, Brazil.

of breast tissue, with little possibility of underlying disease. In such cases, the best conduct is medical monitoring by an endocrinologist and a plastic surgeon, with regular prolactin doses.

REFERENCES

1. Basile FV, Basile AR. Diagnosis and management of galactorrhea after breast augmentation. *Plast Reconstr Surg.* 2015;135(5):1349-56. PMID: 25919249 DOI: <http://dx.doi.org/10.1097/PRS.0000000000001156>
2. Rosique RG, Rosique MJF, Peretti JP. Postaugmentation galactocele without periareolar incision and 8 years after pregnancy. *Plast Reconstr Surg Open.* 2016;4(3):e644. DOI: <http://dx.doi.org/10.1097/GOX.0000000000000648>
3. Yang EJ, Lee KT, Pyon JK, Bang SI. Treatment algorithm of galactorrhea after augmentation mammoplasty. *Ann Plast Surg.* 2012;69(3):247-9. PMID: 22214792 DOI: <http://dx.doi.org/10.1097/SAP0b013e31822af880>
4. Ignacak A, Kasztelnik M, Sliwa T, Korbut RA, Radja K, Guzik TJ. Prolactin--not only lactotrophin. A "new" view of the "old" hormone. *J Physiol Pharmacol.* 2012;63(5):435-43.
5. Chavez-Rueda K, Hernández J, Zenteno E, Leños-Miranda A, Legorreta-Haquet MV, Blanco-Favela F. Identification of prolactin as a novel immunomodulator on the expression of co-stimulatory molecules and cytokine secretions on T and B human lymphocytes. *Clin Immunol.* 2005;116(2):182-91. DOI: <http://dx.doi.org/10.1016/j.clim.2005.03.013>

*Corresponding author:

Simone Corrêa Rosa

SQS 213 Bloco H Apto 104, Asa Sul, Brasília, DF, Brazil

Zip Code 70292-080

E-mail: scrmacedo@yahoo.com.br

Answer



Galactorrhea: how to address this unusual complication after augmentation mammoplasty

Galactorreia: como abordar essa complicação incomum após mamoplastia de aumento

ADRIANA SAYURI KUROGI ASCENÇO¹

First, I thank you on behalf of all authors for the compliment on the work entitled, "Galactorrhea: how to approach this uncommon complication after mammoplasty augmentation," published in the latest issue of the *Brazilian Journal of Plastic Surgery*.

The letter from Dr. Jefferson Lessa Soares de Macedo highlights important aspects regarding the approach to galactorrhea for detection of preoperative and intraoperative risk factors. He pointed out that galactorrhea is physiological and transient, with normal prolactin levels, and is caused by abrupt distension of the breast tissue in most cases. Recommendation for the appropriate dosages of thyroid hormones (T3, T4, and TSH) and prolactin is an important factor. This should be added to the investigation algorithm, as the primary hypothyroidism may be a risk factor of such complication.

The conduct suggested by the authors for the use of lactation inhibitors is not clear. We believe the use of these medications would be beneficial because it inhibits lactic production even in cases of MD physiological, with normal prolactin levels. It would decrease drainage time and probably the risk of contamination and capsular contracture.

The excellent letter adds important data for managing this complication and contributes to a more complete diagnosis and treatment of galactorrhea after augmentation mammoplasty. We appreciate the contribution.

¹ Hospital de Clínicas, Universidade Federal do Paraná, Curitiba, PR, Brazil.