Galactorrhea Following Silicone Breast Implant Placement

Valerii G. Zolotykh MD\(^1\), Anna Y. Kim MD\(^2\), Yehuda Shoenfeld MD FRCP MACR\(^3,4,5\) and Leonid P. Churilov MD PhD\(^1,6\)

\(^1\)Laboratory of the Mosaic of Autoimmunity, Department of Pathology, Faculty of Medicine, Saint Petersburg State University, St. Petersburg, Russia
\(^2\)N.N. Petrov National Medical Research Center of Oncology, St. Petersburg, Russia
\(^3\)Department of Medicine ‘B’ and \(^4\)Zabludowicz Center for Autoimmune Diseases, Sheba Medical Center, Tel Hashomer, Israel
\(^5\)Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel
\(^6\)Saint Petersburg Research Institute of Phthisiopulmonology, St. Petersburg, Russia

A 32-year-old female patient with a typical chest structure and no history of surgical procedure presented to our clinic for the correction of the mammary glands involution and ptosis after cessation of breast-feeding. Her menses were regular. She was primipara and had engaged in breastfeeding for 9 months, until 2006. She experienced no prior episodes of galactorrhea or headache and was not taking any medications.

Ultrasoundography of the mammary glands on 18 March 2018 disclosed a diffuse fibroadenomatosis. The blood prolactin level before the surgery was 374 mIU/L (normal range 108.78–557.13 mIU/L).

A periareolar breast lift with silicone textured anatomical implants (295 mg) had been inserted 24 March 2018. After 2.5 weeks, the woman experienced an excretion of breast milk (galactorrhea) from the wound around the right areola. The next day, milk excretion was noticed through the seams in different areas of both breasts. Visually, redness and swelling of wound edges with dripping of milk was noted. Ultrasound revealed normal breast images and increased glandular tissue with almost no fat. The blood prolactin level reached 729.54 mIU/L. Galactorrhea stopped after 1.5 weeks of daily treatment with bromocriptine.

On 14 April 2018, the patient’s blood prolactin level was 295 mIU/L. It decreased to 226.83 mIU/L when measured again on 23 June 2018. Follow-up in October 2018 (6 months after the surgery) confirmed a good aesthetic result.

There are few similar cases of galactorrhea after silicone mammoplasty found in the literature [1-3]. On average, galactorrhea develops on the 13th day after the silicone implantation. However, there have been reports of cases appearing 18 months after surgery. In a majority of cases (approximately 70%), elevated prolactin levels and sterile bacteriological samples were registered [4].

In our opinion, galactorrhea after silicone breast implantation may result from hyperprolactinemia induced by breast alteration due to reflexes from intercostals nerves, which are common for mechanical injuries of thoracic wall [5,6]. Hyperprolactinemia can be detrimental to the recipient’s health due to the well-known outcomes of prolactin stimulating autoimmune processes [7].

Correspondence
Dr. Y. Shoenfeld
Zabludowicz Center for Autoimmune Diseases, Sheba Medical Center, Tel Hashomer 52656-01, Israel
Phone: (972-3) 553-8070
Fax: (972) 353-2855
email: yehuda.shoenfeld@sheba.health.gov.il

References