

The use of oxidized regenerated cellulose in oncoplastic breast surgery: "warning" for postoperative follow-up!

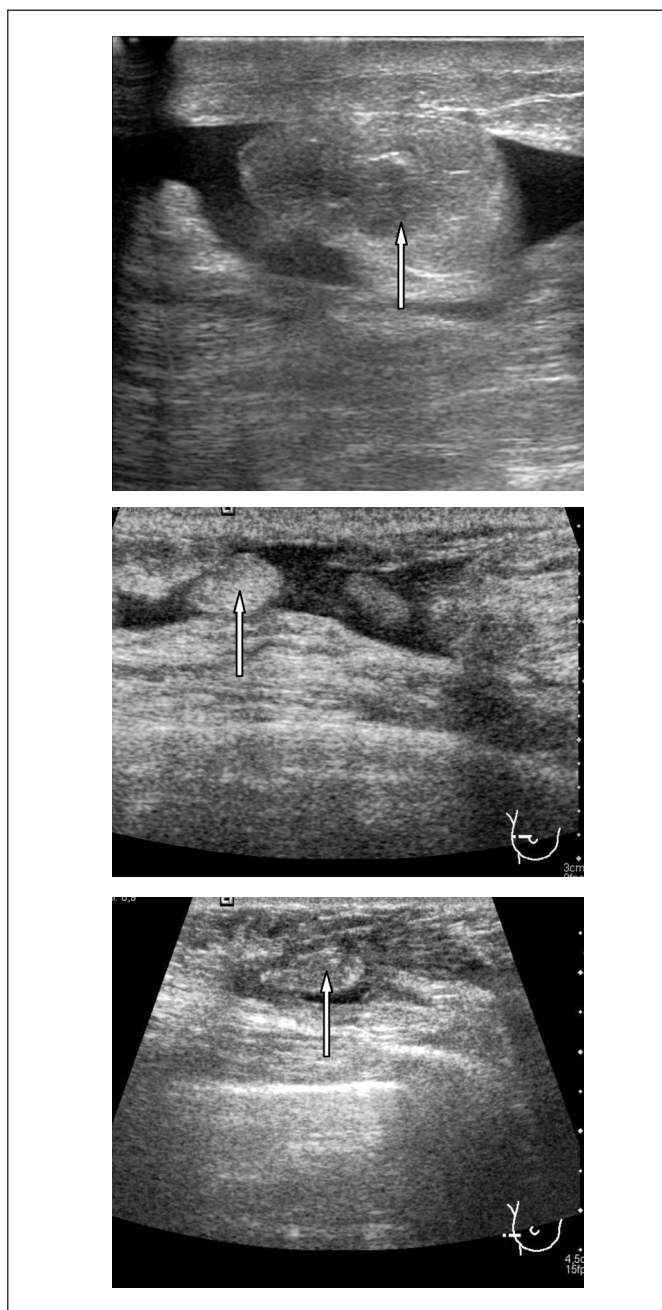
Sir,

We have read with interest the article by Rassu et al on the use of oxidized regenerated cellulose (ORC) in oncoplastic breast surgery ¹. The Authors present their early experience on breast cancer patients treated with breast-conserving surgery and reshaping procedures aided by the use of ORC. With a limited follow-up of 6 to 8 months, the Authors report improved cosmetic results while no data are presented on postoperative complication rate or on the impact of ORC in the postoperative imaging and follow-up in this new subset of patients.

These two parameters should be monitored strictly when proposing the use of a new biomaterial during a surgical procedure, in order to confirm its safety. In our surgical Breast Unit, we have conducted an early experience with the use of ORC (Tabotamp fibrillar®, Johnson & Johnson; Ethicon, New Brunswick, NJ, USA) as a possible aid to reduce the risk of postoperative haematoma and infections and to improve the aesthetic outcomes in patients undergoing an oncoplastic procedures for breast cancer ².

As concerns postoperative complications, a significant seroma was frequently observed in the early postoperative period, as consequence of redundant ORC digestion, and resolved within few weeks with repeated percutaneous aspirations. More demanding inflammatory reactions with redness, itching, swelling, rash and hives in the mammary region were observed only occasionally and were successfully managed with the use of steroids and antihistamine medications.

As concerns postoperative imaging, peculiar signs were always observed on breast ultrasound examination (US), performed six months after surgery. As consequence of the fibrogenetic action induced by ORC and of the partial reabsorption of this biomaterial, fluid anechoic



Ultrasound images (Siemens Antares sonography unit, Siemens Medical Solutions, Sweden) at six-month follow-up in three patients treated by breast oncoplastic conservative surgery with ORC.

With the use of a high-frequency 10–13 MHz linear array transducer, a free anechoic collection without wall with the presence of typical small hyperechoic round masses (yellow arrow) in continuity with the breast parenchyma is showed.

Correspondence to: Gianluca Franceschini, MD, Università Cattolica del Sacro Cuore, Policlinico Agostino Gemelli, Istituto di Semeiotica Chirurgica, Largo Agostino Gemelli 8, 00168 Roma
(E-mail: franceschinigianluca@gmail.com - g.franceschini@rm.unicatt.it.)

accumulation containing small hyperechoic, round components were documented. These typical round images, due to the presence of fibrillar material, appeared non-mobile, avascular, and adherent to the parenchymal tissue planes (Figs. 1, 2, 3) and were often interpreted in an alarming way by the radiologists. The diagnostic interpretations varied from possible residual disease to haematoma sequaele, local abscess or area of fat necrosis.

As the use of ORC could become more frequent in oncoplastic breast surgery, it is important that radiologists become acquainted with these sonographic findings to avoid misdiagnosis and undue alarmism during the follow-up of these patients. It is also important that surgeons specify clearly the use of this biomaterial in the report of the surgical procedure.

References

1. Rassu PC, Serventi A, Giaminardi E, Ferrero I, Tava P: *Use of oxidized and regenerated cellulose polymer in oncoplastic breast surgery*. Ann Ital Chir, 2013; 84(1).
2. Franceschini G, Visconti G, Terribile D, Fabbri C, Magno S, Di Leone A, Salgarello M, Masetti R: *The role of oxidized regenerated cellulose to prevent cosmetic defects in oncoplastic breast surgery*. Eur Rev Med Pharmacol Sci, 2012.

Gianluca Franceschini,
Giuseppe Visconti, Riccardo Masetti

Multidisciplinary Breast Center,
School of Medicine, Catholic University
of the "Sacred Heart", Rome (Italy)