

Within this context, is the woman who undergoes breast implant surgery adequately informed about the type of prosthesis that will be used? It seems to be unlikely according to the number of patients who did not know what type of implant had been used. During the preoperative visit, it is natural for the patient to focus on the end result. However, the surgeon should also focus on the differences between the various types of prostheses and on the safety of the procedure.

At present, the major problem is how to trace all the women with Poly Implant Prothèse breast implants. The difficulty arises mainly from the lack of a national registry of breast implants. A national registry would allow us to quickly identify faulty devices and would make possible the creation of a cohort of patients for future studies of breast implants and the associated complications with the aim of improving surgical techniques and the quality of the implants and thus to improve the satisfaction of the patient. Moreover, it would also enable rapid comparison of national data should a circumstance such as the recent Poly Implant Prothèse incident occur again. The breast implant registry should be an initiative supported by the Ministry of Health aimed at increasing patient safety.

In conclusion, we believe it is appropriate to provide patients more information about the type of prosthesis to be implanted and the differences among the various breast implant brands. Moreover, the institution of a national registry is essential to ensure better safety for patients.

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DISCLOSURE

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Mastotrainer: New Training Project for Breast Aesthetic and Reconstructive Surgery

Sir:

It is necessary to spend many hours studying and practicing manual skills to be a surgeon. Why not undergo training in some type of surgical simulator? With respect to breast operations, finding the optimal material with which to simulate a real breast is not easy.

The main goal of this communication is to present a new project of a surgical model to facilitate the surgical training to allow breast and plastic surgeons to develop their skills and practice new techniques without risks. It is called the "Mastotrainer." It was developed by Pro Delphus and was sponsored by Johnson & Johnson do Brasil Indústria e Comércio de Produtos para Saúde Ltda. Dr. Lyra is the creator of the simulator.

This model (Figs. 1 and 2) was created after the development of a material that simulates human tissues called Neoderma. It is a folding rubber that, together with a group of polymers, allows for more than 60 types of consistencies ranging from mucoid secretions to cartilage. It accepts different colorations, which helps the identification and differentiation of distinct anatomical tissues. The combination of their components simulates the formation of cysts, solid tumors, masses of different consistency (including ones with calcification), and cleavage planes.

These simulators are placed on a fiberglass base that molds sectors of the human body. The used anatomical part is discarded after the operation and the fiberglass base receives another surgical unit to be operated on.

The development and use of newly created simulators in residency or continuing educational medical programs has promoted a shift in surgical education.¹ Through harmless repetition and in an emotion-free environment, the surgeons can theoretically gain extensive experience in a short time.^{2,3}

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Fig. 1. Front view of the simulator.

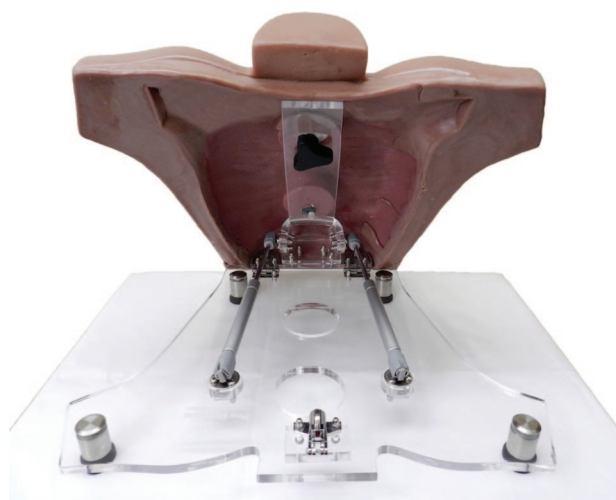


Fig. 2. Back view of the simulator.

This actual Neoderma model was created with a focus on breast aesthetics and reconstruction. For this model, it was necessary to define planes of dissection, muscles, and ribs. The Mastotrainer belongs to a new concept of training and a new class of simulators: Realistic Endo Surgical Trainer simulators.^{4,5}

Manufacturers can offer Neoderma that is very realistic not only in color but also in consistency, feel, elasticity, and resilience, mimicking human tissues. Different techniques can improve the product and allow bleeding inside the cavities. There are tissues that can be cut by an electric or ultrasonic scalpel and laser as well. When suturing, it may provide resistance to multiple types of maneuvers and stitches.

This training model allows new surgeons to safely participate in primary experiences in a surgical field, such as making incisions, suturing, and identifying surgical planes and diminishing the risk for their



Video. Supplemental Digital Content 1 shows the feasibility of the Mastotrainer for implant surgical training, <http://links.lww.com/PRS/A536>.

Table 1. Main Objectives of the Mastotrainer

To be considered like a standard model for training:
Standard model of training for residents (basic programs)
Standard model of training for new breast surgical techniques (advanced programs)
To offer safe and effective training programs
To collaborate with institutional risk management
To allow a certificate of achievement

future patients. (See Video, Supplemental Digital Content 1, which is an example of the feasibility of the Mastotrainer for implant surgical training, <http://links.lww.com/PRS/A536>.) The teaching techniques suggested for each simulator shorten the learning curve for new professionals when starting a new technique.

Virtual simulation of different crises can also be conducted and instructed by this program, and surgeon evaluation under stress situations can be performed. This project focuses on improving surgeon performance by basic and advanced programs as well (Table 1).

The Mastotrainer is a new alternative model specially designed for breast surgical training in the aesthetic and reconstructive field. Validation techniques followed by precision assessments will be necessary to confirm the feasibility of the model.

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