

*focus on...*

# Silicone prostheses: not just for breasts!

More often than not, silicone prostheses are associated with breast volume. Yes, but they have caused research to advance and today this fabulous technology is employed in aesthetic and reconstructive surgery with numerous purposes.

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**B**reast reconstruction is an ambitious objective, since the goal is to restore shape, volume, symmetry, harmony, to an amputated figure. But reconstruction of a breast or breasts, following cancer, requires impeccable materials and a level of technical skills beyond reproach! From now on, these materials allow correction of random or congenital malformations, compensation of bone deficiencies, filling of a muscular depression or tear in the pectoral muscle...

## **The thorax**

This involves "repairing" congenital deformities of the chest wall where the frequency of "funnel" chest (a deformity with an incidence of 1/300) is predominant. Correction with a prosthesis is clearly less aggressive than the other techniques (operation, fat injection into the hollow, under the skin). The Sebbin Laboratories design it in 3D and thus custom make it so that it is perfectly adapted to the anatomy of the recipient. The benefits are numerous: the prosthesis is easy to position, stable and aesthetic, with an extended lifespan.

## **The calf muscles**

Calf prostheses allow correction of the shape of the calf. Initially the technique was developed to correct calf muscle atrophies due to poliomyelitis, club foot or Charcot's disease. Often a unilateral developmental defect or atrophy of the calf is involved, thus one or two prostheses need to be placed and the other calf has to be reduced by liposuction. This technique can also serve to restore shape to a wasting calf.

## **The testicles**

If testicular cancers (this cancer represents 1 to 2 % of male cancers in young men aged between 15 and 35) respond well to surgery, generally with good recovery, the aesthetics of a singular scrotum may be of concern. The objective of testicular prostheses is to enable men to regain integrity over their anatomy as with breast implants for women. Another case of testicular implant is when a child is born with only one testicle (the testicles form in the abdomen at the beginning of life and descend into the scrotum. It can happen that one testicle is blocked during this process). •

## **Implants: a know-how**

**In the Sebbin Laboratories (everything is made in France), where hygiene regulations are comparable with those of an operating room, production of implants pre-filled with silicone gel involves several steps: receipt of the raw materials, preparation of the mixture for manufacturing the prosthetic envelopes, manual soaking, one by one, moulds from several silicone mixtures but which are chemically different. The baking time and homogeneity of the oven temperature are strictly controlled. The implants can have three types of texturing (fine, intermediate and macro texturing). The implants are turned out of the moulds then inspected with different tests including those allowing detection of the presence of bubbles, occlusions or irregularities. Finally, occlusion plugs and a laser stamp facilitate tracing of the implant. Destructive tests (stretching and tearing) are carried out on each manufacturing batch, or on around 3 % of the production.**