



# *Stem Cell Enhanced Natural Breast Augmentation*

## AN ALTERNATIVE APPROACH TO BREAST IMPLANTS

*By Todd K. Malan, M.D.*

**R**Recent technological advances have allowed me to pioneer a procedure, the Stem Cell Enhanced Natural Breast Augmentation, which incorporates the latest advances in fat harvesting, adult stem cell transfers, and breast splinting technology to provide women the option of enlarging their breasts using their own fat, eliminating the need of unnatural implants.

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### HISTORICAL DATA

Since the late 1980s, autologous fat transfer for breast augmentation and reconstruction has remained a highly controversial procedure following its introduction in the U.S. Concerns regarding poor graft, survival, calcifications, liponecrotic cysts, and obscuring mammography had relegated this procedure to little more than a historical footnote. Modern advances in fat harvesting and transfer techniques, digital mammography, and the use of adipose derived adult stem cells and regenerative cells demand a re-examination of this long-standing bias against fat transfer breast augmentation.

Free fat for body contour correction has been widely accepted and is considered an excellent technique throughout the cosmetic industry. Since fat has a higher viscosity than normal saline and shares a similar texture and feel as normal breast tissue, it seems logical to replace

saline with autologous liposuction fat. One of the major advantages in using autologous fat as the fillant is the ability to avoid use of controversial material in the body. Since the fat is confined, theoretically, the implanted fat will not be subjected to body inflammation and fibroblastic infiltration. Therefore, fibrotic changes and calcification are limited, if not completely eliminated.

lower abdomen, buttocks, and medial thighs as the sources of fat donation. Until now, the recovery of fat from liposuction has been a laborious and timely process, involving centrifuges and prolonged time to "process" the fat before it was able to be used for injection. A process which, in the past, would have taken weeks can now be done in one single office visit. While traditional liposuction basically destroys fat

## FAT HARVESTING & ADULT STEM CELL TRANSFER

The Stem Cell Enhanced Natural Breast Augmentation procedure is unique because we utilize the latest technologic advances in both fat harvesting and adult stem cell transfers. Cell-enhanced reconstruction uses adipose fat, which is a rich source of both stem cells and regenerative cells. Soft tissue transplants have been done for many years, but this new procedure uses a special process to ensure that the transplanted cells will live and adapt to the transplantation site. These stem cells are not the controversial embryonic stem cells.

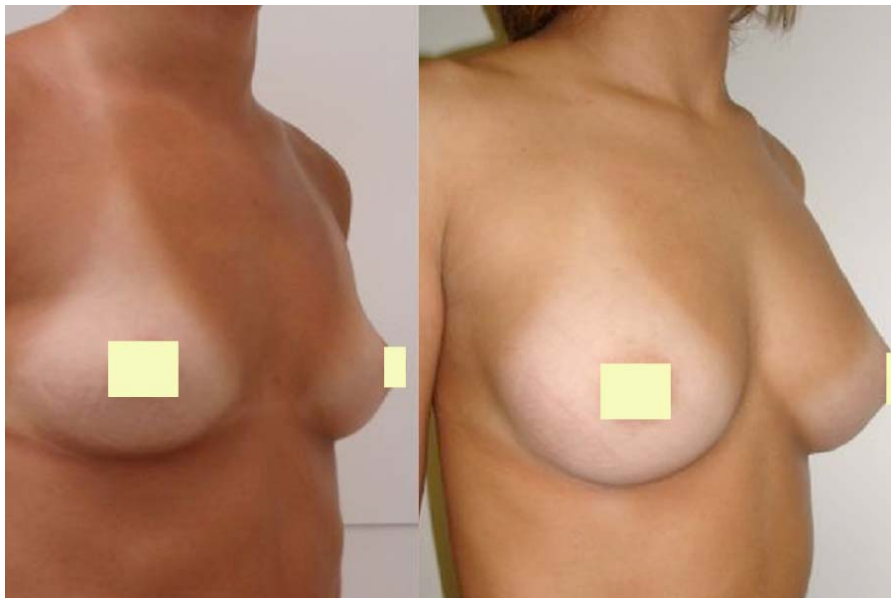
After fat removal the cells are transferred in order to separate regenerative cells and stem cells from the fat cells. Next, the regenerative cells and stem cells are washed and concentrated. The concentrated stem cell mixture is then combined with the fat cells and injected into fat that is already present in the breast, where it fills in and replaces tissue volume.

The injection of fat along with the stem cells results in a permanent 250cc to 500cc overall breast size increase, allowing for a 1 or 2 bra cup size increase. A pressure splint may be used after the procedure to ensure that the fat remains in place and assist in promoting regeneration of the transferred fat and stem cells.

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Fat harvesting and collection is accomplished with a standard setup of liposuction of patient's saddlebags, love handles,

cells, newer technologies such as water-jet assisted liposuction loosen fat without requiring impact on the cell.



*Before (left) and After (right) a stem cell enhanced natural breast augmentation.*

## STEM CELL VS. IMPLANTS

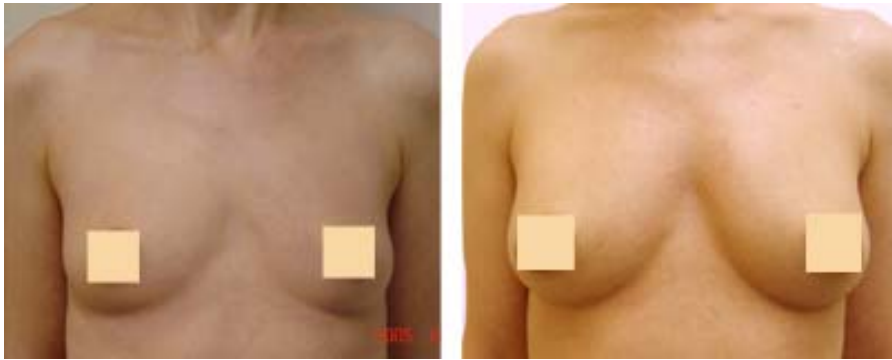
There are several advantages to Stem Cell Enhanced Natural Breast Augmentation. Saline or silicone implants, which are considered the standard for cosmetic breast augmentation and reconstruction, show complication rates to be as high as 25% with a re-operation rate of 100% at 10 years. Additionally, implants can obscure 15-50% of normal breast

tissue on screening mammography, making early detection or follow-up to cancer more difficult.

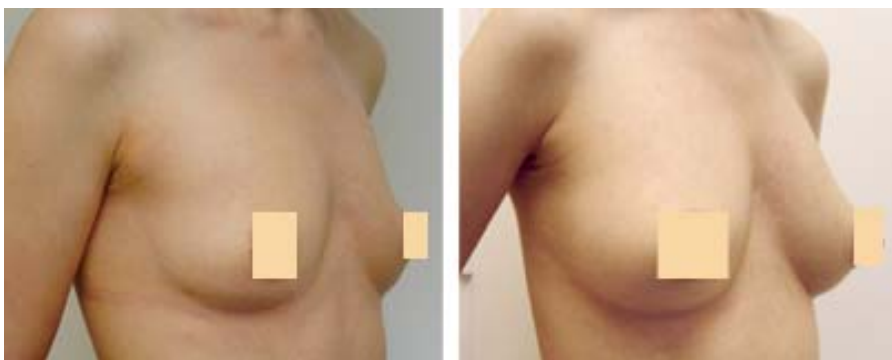
Autologous tissue does not exhibit reactive inflammation, rejection, or autoimmune disease. Stem Cell Enhanced Natural Breast Augmentation elicits an excellent cosmetic result including a permanent natural feel to the breasts. Unlike implants, this procedure will not interfere with future mammograms. The procedure, performed in

conjunction with water-jet assisted liposuction, allows artistic body re-contouring to complement breast augmentation for a new total-body look. **ATI**

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### About the Author

**Todd K. Malan, M.D.**, founded the Innovative Cosmetic Surgery Center in Scottsdale AZ to help improve advanced research and physician training in minimally invasive cosmetic surgery techniques and to provide patients with safe and reliable options to traditional surgery.

Dr. Malan continuously expands his knowledge and training to maintain industry leadership, which constantly places him at the forefront of advancements. He is a nationally recognized speaker and educator on the Natural Breast Augmentation and advanced body contouring procedures. His expertise is evident through his respected surgery center, technological developments, loyal patient following, and peer recognition. For more information about this topic, please visit Dr. Malan on the worldwide web:

[www.smartliposurgery.com](http://www.smartliposurgery.com), or call: 866.985.7999.