Fat Transfer Procedures Gaining Interest

Cell-enriched fat transfer may sound more like a science fiction comic than a surgical procedure, but this relatively new technique is allowing plastic surgeons to take fatty (adipose) tissue from a patient's own body, purify it, and place it in a different location of their choice. Research over the past decade has shown that adipose tissue contains large amounts of stem and regenerative cells, the same as those found in human embryos.

The initial surguries conducted at La Jolla Cosmetic Surgery Center in California have exceeded surgical expectations. For example, doctors there state that by opting for CEFT in breast augmentation, patients can avoid the risks associated with implants, suffer less scarring, experience less pain during recovery, and enjoy more natural-feeling breasts. Although CEFT is not appropriate for all breast augmentation cases, the procedure is exactly what many women are seeking.

Breast cancer survivors, for example, are especially interested in fat transfer. Treatments for breast cancer, particularly radiation therapy, mastectomy, and lumpectomy, can result in damaged skin and breast tissue that is difficult to repair. When radiation therapy is combined with lumpectomy, conventional procedures cannot restore the breast completely. Cell enriched fat transfer can combine precise control of injections with the benefit of stem cells to help build the breast in a natural way.

With older fat transfer procedures, the patient retained about 30 percent of the injected adipose tissue, as the rest was later absorbed by the body. With CEFT procedures, patients can retain approximately 90 percent of the injected tissue. This large gain is made possible in part by the stem and regenerative cells that help the graft integrate with surrounding tissue. Since the tissue comes from the patient's own body, there is no risk of rejection. Women who have never seriously considered breast augmentation because of concerns about an implant may now see a safer, more natural alternative.

Cell-enriched fat transfer could also have implications beyond cosmetic surgery. Harvested adipose tissue can be stored for future use, with those stem cells potentially being used to help restore heart muscle after a heart attack.