

face

restoring the rounded contours of youth

Micro fat grafting offers multiple aesthetic and anti-ageing benefits, says Sydney cosmetic surgeon **Dr Longin Zurek**.

More than 100 years have passed since fat grafting was first reported as being used successfully to repair facial defects. Surgeons at that time recognised the great advantage that fat transfer offered for re-establishing fullness and correcting contour irregularities.

Unpredictable fat graft survival has, however, always been a problem. Although today this has not been completely solved, great progress has been made in improving the results.

New techniques of reducing the size of the graft to tiny 'fat parcels' encourages a better blood supply to the tissue, and reinserting the fat via micro-injections reduces damage to the delicate fat cells.

In recent years, studies of fat tissue have shown that in addition to mature fat cells, fat tissue contains stem cells capable of differentiating into many types of tissue such as bone, cartilage, muscle, blood vessels and nerves. This ability allows the fat to enhance new vessel formation or even replace damaged cells.

In addition to the known function of fat as an energy reservoir with insulating properties, it has now become apparent that fat is a repair organ and capable of soft tissue regeneration.

Fat grafting has been successfully used to treat ulcers following breast radiotherapy and burns, capsular contracture around breast implants and reconstruction of breast deformities, among others.

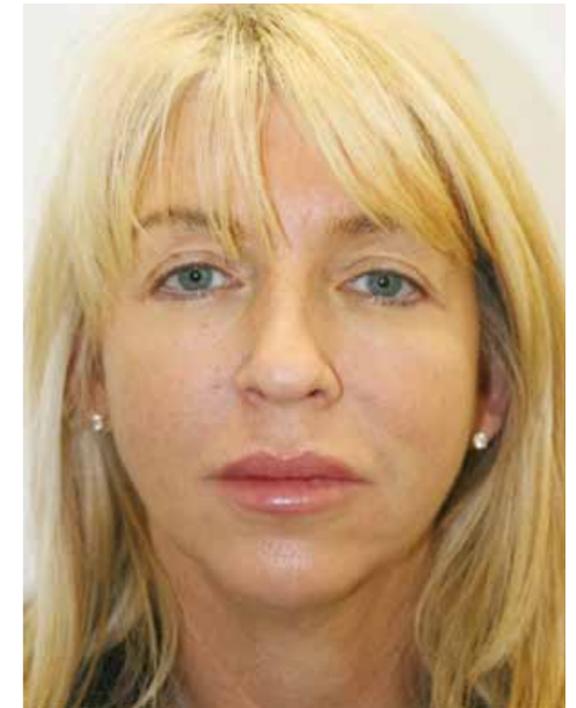
Remarkable improvement in skin quality has also been observed several months following the fat grafting procedure, which is probably the result of the introduction of stem cells and growth factors.

Dr Zurek has some 15 years' experience in fat grafting, his main interest being replenishing and rebalancing volume as part of facial rejuvenation, which can be performed as a separate procedure or in combination with a face or neck lift. **acsm**

Case study



BEFORE



AFTER orbicularis suspension, fat micrografting and AGE Filaments by Dr Zurek

Summary of Microfat Grafting by Dr Zurek

Microfat grafting can restore youthful facial volumes by transferring the patient's own fat cells. The procedure is performed under local anaesthetic and oral sedation. It is an ambulatory (walk in, walk out) procedure.

Common areas of the face that can be treated are:

- Hollow temples
- Hollows underneath the eyes
- Hollows of upper and lower lip area
- Lips to enhance volume
- Chin to increase projection
- Cheek (tear troughs) to restore and enhance the roundness of the cheeks.

Common donor areas where fat is harvested, through a tiny 2mm puncture:

- Inner or outer thighs
- Inner knees
- Hips.

Fat is transferred to the face through four tiny hidden punctures; no sutures are required. There may be minimal swelling and occasional bruising after the fat grafting procedure but this should typically resolve after a few days in most cases.

The majority of transferred fat is expected to permanently increase volume. The regenerative effects of the fat grafting produces improvement in skin quality, reduction of wrinkles and improvement in scars.