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Fillers – What do fillers fill?

- Wrinkles and folds
 - around the mouth nasolabial & puppet lines
 - frown lines & crow's feet
 - Hollows under the eyes
- Acne scars (except ice-pick scars)
- Other scars enhance lips, chin, cheek & eye hollows, cheek bones, etc.

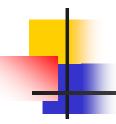
Fillers

Non-permanent

Long lasting

Permanent

fat



Non permanent fillers

1. Collagen – e.g. Zyderm, Zyplast

2. Hyaluronic acid e.g. Restylane (non-animal), Hylaform, Juvaderm & Perlane (non FDA approved)



Long lasting fillers

Poly-L-Lactic Acid — Sculptra (FDA approved)

Calcium hydroxyapatite – Radiance (FDA approved)

Permanent fillers

- Silikon (silicone) FDA approved
- PMMA/collagen Artefill (non FDA approved)



Fat fillers

- Autologous fat
- Semi-permanent
- No risk of rejection or allergy

Problems with fillers (1)

Collagen – short duration; not enough volume

- Hyaluronic acid pain & bruising
- Radiance expensive; duration less than expected

Problems with fillers (2)

- Silicone multiple treatments required
- Sculptra expensive; reconstitution & multiple treatments required
- Fat must harvest first; may not last long
- Artefill non FDA approval; ? granuloma formation

Botulinum toxin

- Neurotoxin for paralysis of muscles
- Type A Botox (FDA approved) & Dysport (Europe approved)
- Type B Myobloc (FDA approved for cervical dystonia)

Usage of botulinum toxin

- Cosmetic treatment of wrinkles, expression lines & folds & muscle hypertrophy
- Hyperhidrosis (excessive sweating) of palms, soles & axillae
- Migrane, painful scars, tics, Bell's palsy, cerebral palsy, blepharospasm, cervical dystonia, tennis elbows, etc.

Cosmetic areas where Botulinum Toxin is useful

Frown lines, crow's feet & forehead

Around the mouth

Neck lines

chest

Botulinum Toxin A

Botox – FDA approved

Dysport – FDA approved

 Other home made substances – non FDA approved

Clinical effects & duration of botulinum toxin

- Effect lasts for 3-6 months usually
- Minimal to nil side effects
- Overdosage or incorrect injection may lead to temporary eyelid drooping & facial asymmetry
- ? Long term use may lead to muscle atrophy or tachyphylaxis
- Injection must not be carried out before light or radiofrequency (RF) operation

Light treatment for Skin Rejuvenation (Photorejuvenation)

Lasers for pigment & vascular lesions & photorejuvenation

- Intense Pulsed Light (IPL) for pigment & vascular lesions & photorejuvenation
- Ablative skin resurfacing lasers & fractional resurfacing laser

Photomodulation with LED light sources

Problems seen in ageing skin

- Wrinkles fine (from collagen & elastic fibre degeneration, thinning of epidermis & dermis, & decreased dermal ground substance & matrix), coarse (expression lines, etc.)
- Pigmentation irregularities freckles, lentigines, senile keratosis, poikiloderma, moles, etc.
- Vascular lesions telangiectasias & senile purpura

Wrinkle reduction

- Coarse wrinkles Botox or fillers injection, skin resurfacing, combining with photorejuvenation programs
- Fine wrinkles photorejuvenation with IPL & lasers; microdermabrasion & topical antioxidant/sunblock; RF operation; Fractional resurfacing, etc.

Reduction of Pigmentation

 Combination of laser, IPL & topical whitening products (tyrosinase inhibiting agents), topical antioxidants (e.g. Vitamin A, C,E, etc.) with/without chemical peeling (AHA, BHA, TCAA)

Reduction of vascular lesions

Combination of laser & IPL operations

Multiple sessions often necessary for best results

Oral Vitamin C

Complications of light treatment

- Overdosage or incorrect use may lead to burns with/without permanent scarring or pigmentary changes
- Paradoxical darkening of certain skin lesions (e.g. melasma) may occur
- Damage to eyes with insufficient eye protection

Maintenance treatment after light therapy

- Adequate sunblock
- Topical antioxidant
- Topical pigment stabilizers (tyrosinase inhibitors)
- Topical DNA protectors, e.g. ferulic acid
- Adequate skin moisturisation
- Repeat light treatment at intervals but not continuously