



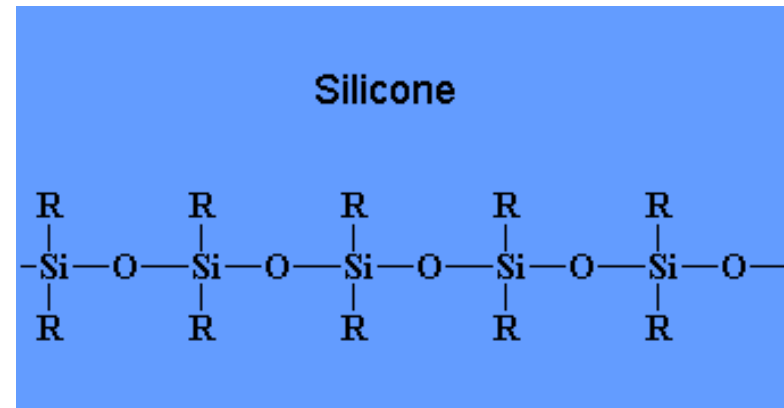
A history of silicone injections



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Characteristics of silicone

- Chains of silicon molecules
- Side groups of other molecules
- High degree of chemical inertness
- Thermal stability
- Resistance to oxidation
- World War II –silicone developed as a rubber substitute
- Short chains (liquid)
- Long chains (rigid)



Early History of Silicone Injections

- Liquid silicone developed as insulator in transformers
- Post War – Used for Japanese Prostitute breast enlargement
- 1960's and 70's breast enlargement procedures introduced in the US





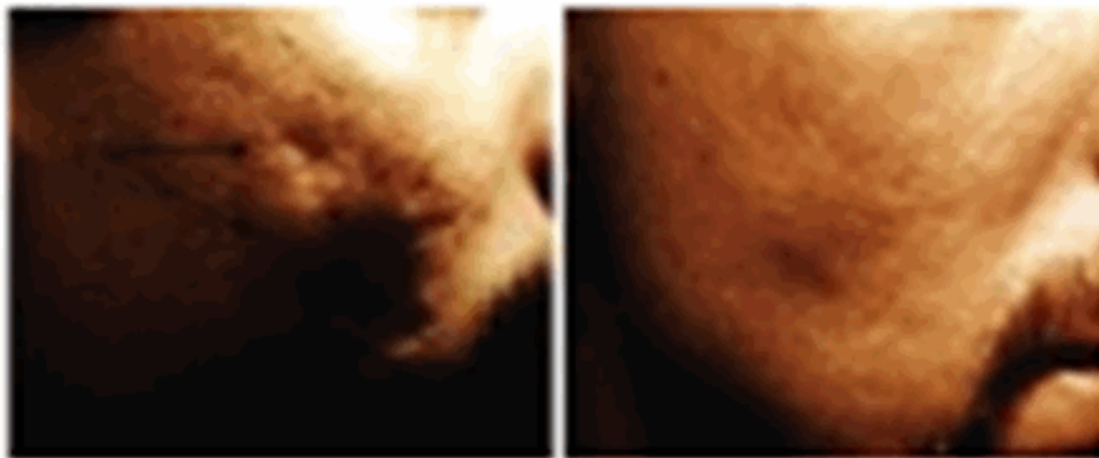
Popular Modern uses of Silicone Injection

- Smoothing wrinkles and lines
- Treatment of acne scarring
- Feminization of the face and body (especially popular for transgenders)
- Male genital enlargement
- Plumping up of breasts, buttocks and lips

Microdroplet Silicone Injection

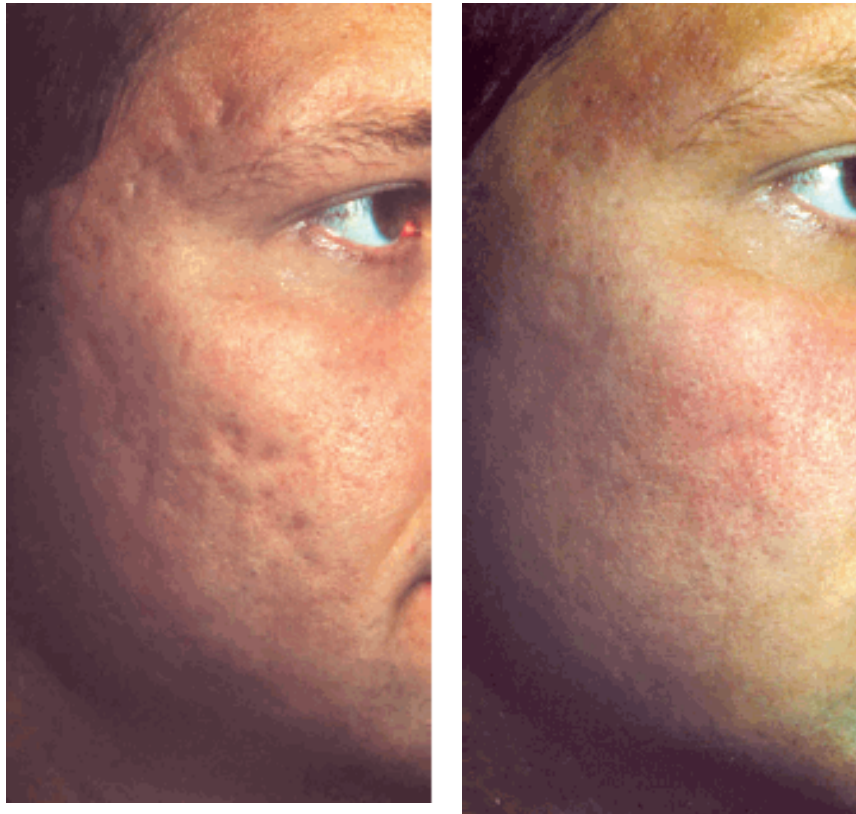


Case Study 1



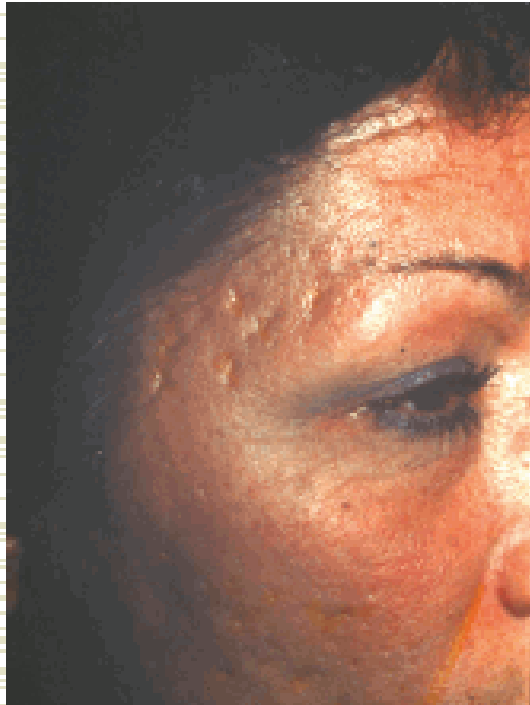
Acne Scarring – before and after microdroplet silicone treatment

Case Study 2



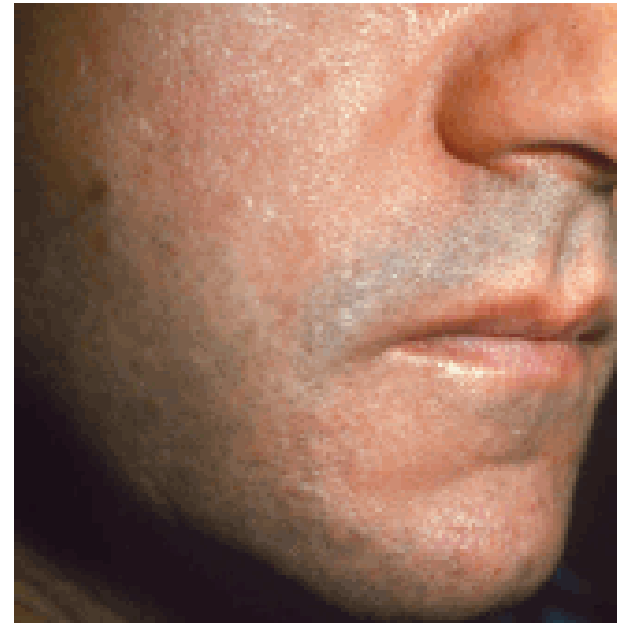
**Before (left) and 10 minutes
after treatment (right)**

Case Study 3



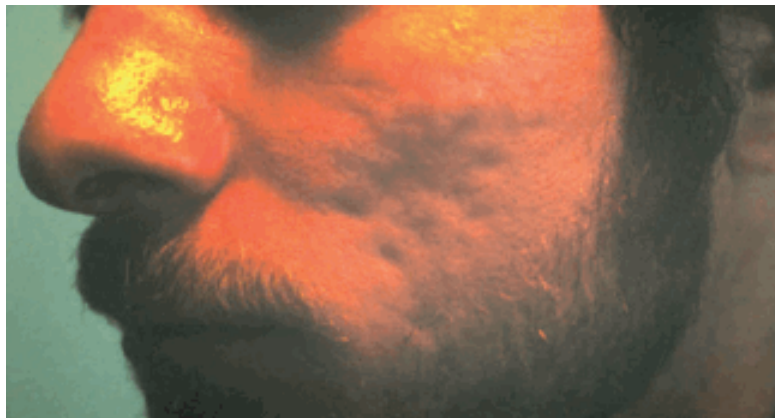
**Pre-Treatment
(left) and 10
minutes after
Treatment (right)**

Case Study 4



Pre- Treatment (left) and 10 year followup (right)

Case Study 5



**Pretreatment (left) and
15 year followup**

Case Study 6

Before



After



**Lip Augmentation – before and after
microdroplet silicone treatment**

From - <http://www.locateadoc.com/gallery.cfm/Action/Gallery/GalleryID/2699>

Silicone Injections – Ongoing Clinical Trials



From – New York Times – Fashion and Style

Extreme Case Complication



Taken from – Transsexual Roadmap



Transsexual Parties



Taken from – Transsexual Roadmap



General Complications of Microdroplet Silicone Injection

- Granulomas
- Disfiguring nodules
- Possibly pneumonitis
when very large
quantities are used



Complications reported by Professionals

For Microdroplet Silicone Injection

- Dr Roda Nairns reports 0 in several hundred patients
- Dr David Duffy reports 1 in 4000

Nodules



Taken from – Archives of Dermatology



Banning of silicone injections

- Japan during the 1950's
- US the state of Nevada and then California and Colorado, 1975
- FDA, 1965 Ban for doctors without permit to conduct human experiments.
- 1992 most silicone implants also banned (ban remained in place till 2005)



Police Arrests following Ban



Currently FDA approved Types of Silicone Oil





Advantages of silicone injections

- Permanent filler
- Claims of superiority of routinely obtainable corrections
- Not toxic
- Ease of use
- Negligible recovery time
- Inexpensive \$500/10 cc
- Minimally antigenic
- Almost negligible complications of minor type*
- Non- teratogenic
- Non- carcinogenic
- Does not support bacterial growth
- No migration of silicone particles*

* *Microdroplet Silicone Injection only*

Technique review

- ◆ .4 to .6 cc recommended/session
- ◆ Fine lines to deeper
- ◆ 27 to 25 g needle
- ◆ Thicker than Restylene
- ◆ Wet line, vermillion, marionette, and nasal/labial
- ◆ Wet line is into muscle
- ◆ Shape of lip: double convex





Conclusions

Silicone injections when administered by the approved small quantity microdroplet injection technique using pure, FDA approved silicone by an approved physician have proved remarkably effective form of tissue augmentation, especially for treatment of broad based acne scars.

Furthermore, reported complications are few and invariably of a minor nature.

Clinical trails are ongoing.