Complications of Chemical Peeling

- Pigmentary Problems
- Scarring
- Delayed Healing
- Persistent Erythema
- Infection
- Acne and milia
- Poor Physician/Patient Relationship
- Unrealistic Expectations
- Contact Dermatitis
- Disruptive Keratoacanthomas
- Cardiac arrhythmias with Phenol/Cantharidan Full face

Resurfacing-Informed Consent

- 7-10 days of Healing Time
- Color change-temporary or permanent-light or dark
- Infection-Herpes or Bacteria (or Fungus)
- Acne afterwards
- Scarring
- Skin sensitivity to Wind and Sun
- No predictability or guarantee
- Photographs permitted

Hyperpigmentation

- Usually Temporary
- Treatment:
  - Bleaches: Hydroquinones 4-6-8% or -tretinoin and non-fluorinated steroids
  - Light peels

Scarring with Medium-Depth Peeling Combinations

- 10/4000 peels (.25%) - CO2 + TCA
- 40/500 peels - JS + TCA
- 0/100 peels - GA + TCA

Scarring with Deep Chemical Peeling

- Greater than 1000 Cases
- Less than 1% scarring
Treatment of Scarring
- Steroid Topical, Intraleisional...Tape too expensive
- Flashlamp-pumped Pulsed Dye Laser: 585nm or dual wavelength non-Q switched laser for scar treatment, performed every 2-4 weeks
- Silicone gel sheeeting
- Surgical Excision
- Micropigmentation
- (Observation)

Scarring Risk Factors in Resurfacing
- Hereditary Predisposition: Darker skin?
- Time Interval between resurfacing and lifting or isotretinoin (dose related)
- Concentration of Wounding Agent
- Excessive Epidermal Abrasion
- Location and Actinic Dermal Skin Quality with adnexal quality
- Poor After Care leading to infection
- Inadequate Nutrition

Erythema Post Resurfacing
- Fitzpatrick Skin Type
- Atopy
- Rosacea
- Scotch/Irish/Germanic Plethora
- Tretinoin?

Delayed Healing Syndrome
- Serous Granulation, Friable, Stellate, nonindurated, painful, ulcerated areas by day 10-14 after resurfacing
- Resembles Infection
- Unpredictable
- Thin Skin
- Produces Scarring
- Treat with Artificial Wound dressings or Intraleisonal Triamcinolone

Herpes Simplex
Early intervention or prophylaxis makes this complication controllable unless primary Herpetic attack necessitates IV acyclovir

Contact Dermatitis
More common with laser since epidermis still present but not viable in peels but removed with laser
Inherent Errors Leading to Complications

1. Accidental Solution Misplacement to eye or body
2. Incorrect Peel Pharmacology

Mixing of TCA
Trichloroacetic Acid 10-35%
Mix: Weight to Volume Method

Dermatologic Lab and Supply (Delasco) is a supplier and sponsor of IPS

Cardiac complications in deep chemical peels

The objective was to estimate incidence of cardiac complications during full-face deep chemical peel, and to suggest the methods to reduce the rate of this potential complication. 6.6% incidence.

METHODS:
Clinical data on the patients being treated by full-face deep chemical peel between December 1, 2004, and November 30, 2005, were recorded. Full cardiac monitoring was performed during the peeling procedure. Any arrhythmia or medical intervention was recorded.

RESULTS:
A total of 181 patients have been treated during the study period. All the patients were female; the mean age was 56 years (range, 30-77 years). In 12 patients (6.6%), cardiac arrhythmia has been recorded during the procedure. Cardiac arrhythmia was more common in patients with diabetes, hypertension, and depression. In 4 patients the arrhythmia was self-limited and did not require any intervention. In the other 8 patients, 100 mg of lidocaine was given intravenously to control the arrhythmia.

CONCLUSION:
The incidence of cardiac complications in appropriately performed deep chemical peeling is lower than previously appreciated. These patients were peeled with a phenol concentration more than the Hette formula.

The ASDS was the first national organization to survey the non-physician practice of medicine and peeling beyond the stratum corneum and epidermis.

Any resurfacing below the stratum corneum involves biologically living cells and is the practice of medicine.

Any dermal resurfacing can result in permanent complications and should be performed and followed-up under the direct, onsite supervision of a physician-skin expert, such as a dermatologist/dermatologic surgeon.

• You have little leg to legally stand on with a peel without any literature to support home-made combinations
• Microdermabrasion + TCA
• Proprietary Body peels with no depth substantiation
• Mixtures of acids: Phenol, TCA, Salicylic, AHAs
• A drop of croton oil here and there
• Superficial laser followed by peeling agent