

SUMMARY

Chemical skin peeling is a process in which chemicals are applied to the skin in order to produce alteration in the gross and microscopic anatomy of the epidermis and dermis.

The aim of our study is to evaluate the efficacy of superficial chemical peeling agents (TCA 35%, Jessner's solution and glycolic acid 50%) in the treatment of melasma, fine wrinkles and acne vulgaris.

This study included 45 patients complaining of melasma, fine wrinkles and acne vulgaris. These 45 patients had been divided into three groups, each group was composed of fifteen patients (5 patients of melasma, 5 patients of fine wrinkles and 5 patients of acne vulgaris). Each group had been subjected to one of the superficial chemical peeling agents (glycolic acid 50%, Jessner's solution and TCA35%).

The patients were instructed to apply tretinoin 0.05% before beginning the peeling session every night for two weeks, this was used for mild debridement of the stratum corneum of the epidermis.

According to our study, we found out that there were no significant difference in the results of the three chemical agent used in the treatment of melasma, acne and fine wrinkles.

SUMMARY

The results varied according to the skin type, colour and texture. The thin skinned, fair complexioned patients are better candidates than those with thick oily skin, olive complexion.

The results also varied according to the type of melasma lesions, the predominante type of acne lesions and the site of fine wrinkles. Patients with epidermal type of melasma, or predominant comedoneic or pustular or papular acne lesions, or with periorbital fine wrinkles are better candidates than, those with dermal or mixed type of melasma, or with pitted scars or post inflammatory hyperpigmentation on ~~with~~ fine wrinkles on the forehead.

We also found out that Jessner's solution was the best chemical agent in the treatment of melasma, acne and fine wrinkles, not because it gave better results but because it took shorter time than Glycolic Acid 50% and TCA 35%. The patients also could wear make-up at any time after Jessner's peel.

The advantage of Jessner's solution over TCA:

- a) There is no ~~danger~~ of using the wrong concentration of solution.
- b) No need to neutralize the solution, and therefore no need to time the duration of application.
- c) There are fewer chances for mistakes.