

Studies on the safety of agents for chemical peeling

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Chemical peeling is one of dermatological treatments for certain cutaneous diseases or conditions or aesthetic improvement; it consists of the application of one or more chemical exfoliating agents to the skin. Recently in Japan, chemical peeling has been very popular in medical as well as aesthetic treatment. Because the scientific background and an adequate approach are not completely understood or established, medical and social problems have been reported. To address these issues, we evaluated the chemical peeling agents such as phenol and trichloroacetic acid (TCA). The studies of human skins revealed that topical treatment of phenol induced deeper degeneration of the skin than that of 40-60% TCA. Under the careful monitoring and examinations, such agents had little damages to the skins. In addition, when compared with standard surgical therapy and some of non-invasive therapies, the chemical peeling therapy by phenol and TCA have several advantages such as easy procedures, non time-wasting, no requirements of special equipments, easy control of pain and easy post-treatment follow-up. Phenol and/or TCA peeling will be a new tool for the aged patients with skin tumors, although the careful follow-up will be needed to determine the ratio of recurrence and appropriate intervals of peeling.