EFFICACY AND SAFETY OF SALICYLIC ACID AND GLYCOLIC ACID AS AN ADJUNCT TO TOPICAL DEPIGMENTING AGENTS IN THE TREATMENT OF MELASMA

SRI KUMAR NAIR 1001231132

MASTER OF SCIENCE (ANTI-AGING, REGENERATIVE MEDICINE AND MEDICAL AESTHETICS) FACULTY OF MEDICINE AND HEALTH SCIENCES UCSI UNIVERSITY

ABSTRACT

Melasma is a hyperpigmentation skin disease characterized by an irregular brown or greyish-brown facial hypermelanosis occurring commonly in women. This skin disease is predominant in UV intense radiation areas. Some of the causative factors are hereditary, being exposed to UV radiation, oral contraceptives, pregnancy, estrogenprogesterone treatments, thyroid related conditions, certain cosmetics and phototoxic and anti-seizure medications. The common treatment for melasma includes chemical peels such as glycolic acid (GA) peels and salicylic acid (SA) peels. However, the safety and efficacy of these peels are not known due to lack of systematic studies. The aim is to review the literature focusing on melasma and SA and GA peels and to evaluate the recent publications that help to compare the safety and efficacy of SA and GA peels. A structured literature review was conducted by the accepted scholar peer articles according to searching strategy. The structured literature review was formulated based on PICOS methodology viz., P; Population (melasma patients), I; Intervention (SA and GA peels), C; Control (conventional therapy), O; Outcome (Improvements based on MASI scores, photographs at baseline and after treatment, calorimetric analysis) and S; Study designs to identify specific inclusion criteria for choosing studies for the investigation. On the basis of a structured review, it cannot be concluded whether GA and SA have better effect on treating melasma. With respect to safety levels, it can be concluded that SA peels are safer than GA peels since SA peels have minimal side effects. There were fewer comparative studies on chemical peeled and unpeeled regions and this limits the conclusion that chemically peeled areas are more effective than unpeeled skin regions.