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HYDROCUINONE CONTENT ANALYSIS STUDY ON COSMETIC SUPPLIES IN THE MARKET

(xv + 115 pages + 3 pictures + 1 table + 7 attachments)

ABSTRACT

Background: Creamy cosmetic preparations containing hydroquinone are widely used to remove black spots on the face. Hydroquinone blanching is very slow and will be faster with higher levels. High levels will give unwanted side effects such as the appearance of a number of diseases, such as vitiligo (skin pigment is lost, forming white areas such as tinea versicolor to ochronosis).

Methods: This study uses article literatures with the theme of analysis of hydroquinone content in cosmetic preparations on the market using 5 journals consisting of 2 international journals and 3 national journals. The journals obtained are then checked for accuracy which consists of journals registered in Schimago or not, Q how many, H index, and Impact factor. For national journals, it is done checking the accreditation status of Sinta.

Result: Based on the results of a literature review of all articles, it was found that all samples tested positive contained hydroquinone. Of the 98 samples of skin lightening creams tested by the HPLC method, the hydroquinone levels were 0% - 6% (w / w), meaning that they exceeded the hydroquinone level limits set by the FDA and the Ministry of Health Regulation in 1998, namely the hydroquinone level should not be more than 2 %. While the whitening cream samples tested using the UV-Vis spectophotometric method obtained levels of less than 2%, it means that they have met the requirements set by the FDA and the 1998 Minister of Health Regulation.

Conclusion: Cosmetics preparations for facial whitening creams, whitening creams, and herbal whitening creams contain hydroquinone with levels required by the FDA and the 1998 Ministry of Health. Meanwhile, cosmetic preparations for skin lightening creams contain hydroquinone with levels not meeting the requirements set by the FDA and the 1998 Minister of Health Regulation.

Keywords: Cosmetics, Hydroquinone, Spectrophotometry, HPLC.

Bibliography: 16 (1998-2019)