A qualitative parameter based open trial was carried out with the participation of 40 patients, each control and test group consisting of 20. The two groups were given a common set of instructions to be followed during the trial period. The test group was given a powdered dry scrub to be used for 6 weeks in addition to the common instructions. Condition of all the patients was recorded weekly. At the end, the data collected over 6 weeks were analysed.

The results revealed that the scrub could have a positive effect on excessive sweating and excessive body odour along with some common minor skin problems. Compared to the control group, 90% of the patients of the test group showed reduced levels of sweating than usual and 70% reported a total relief from excessive body odour. It was concluded that the tested scrub was successful in treating hyperhidrosis, bromhidrosis and mild skin problems in the sample group.

Key words: Hyperhidrosis, Bromhidrosis, sweating, skin, body odour, scrub

PP-43: A natural player in the fairness of skin, Novel polyherbal ingredients inhibiting melanin synthesis and transfer
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The 'quest for fairness' is global and the search for safe skin lightening products is one of the pinacities in the billion dollar cosmetic industry. Melanin is responsible for the color of the skin. Tyrosinase is the key enzyme that mediates conversion of tyrosine to melanin by melanocytes. Skin color can be manipulated by use of fairness creams with skin lightening/whitening ingredients and most of the skin lightening agents exhibit their action by tyrosinase inhibition. Further, the dendrites of melanocytes aid the process of transfer of melanosomes to keratinocytes and any qualitative and quantitative changes in the dendrites would affect the transfer and thereby melanization of the skin. Therefore besides understanding the tyrosinase modulating activity, it is also necessary to study the effect of the skin lightening agent on the dendrites of the melanocytes.

The present study threw some light on skin lightening effect of novel polyherbal preparations by using the extracts of Hemidesmus indicus, Decalepis hamiltonii, Raphinus sativus var. longipinnatus (white), Raphinus sativus var. sativus (Red), Curcuma zedoaria and Aloe vera individually in different permutation combinations. Tyrosinase inhibition assay, melanocyte cell culture assay, measurement of dendrite length and number of melanocytes were used as methods to evaluate the efficacy of the extract combinations.

The results of the present study indicate that fairness can be achieved in a natural way using plant extracts.

PP-44: An Experimental Study to Formulate an Ayurvedic Aftershave
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Shaving is an important habit which was considered good and hygienic in the ancient texts. Frequent shaving causes great damage to the skin. Aftershaves help to reduce the inflammation and smooth the skin after shaving. Alcohol being a main ingredient in common brands probably has an undesirable effect on the long run. The need of a better product was strongly felt and an experimental study was done to fulfill it. Hypothesizing that the medicines mentioned in Ayurvedic traditional texts can be formulated in to a successful aftershave an experimental study was carried out to produce an aftershave with Alum as main ingredient. Problems of the current products were
identified via a questionnaire. Several experiments were done in different aspects to make a product which can be readily used and marketable. The experiments resulted in a gel with Alum solution as the main active ingredient. The new product was given to 30 healthy males who are daily clean shavers in BMARI. 53.33% of the sample group rated the product as good while 46.66% found it satisfactory. It was seen that alum can be formulated into a successful aftershave.

Key words: Aftershave, Alum, Ayurvedic

PP-45: Development and densitometric standardisation of Convolvulus pluricaulis containing herbal Medicinal products by quantification of marker compounds
U.K. Patil

Convolvulus pluricaulis (Fam. Convolvulaceae) is an aperennial herb with a small woody-branched rootstock and occurs in tropical and subtropical countries. It is available in Asian market as Shankhpushpi. A thin layer chromatographic method with densitometric UV detection at λ=226 nm has been developed for standardization of Convolvulus pluricaulis containing herbal medicinal products by quantification of one isolated marker compound. The isolated marker compound was characterized as 3β,23,24-trihydroxyolean-12-en-28-oic acid. TLC analysis was performed on aluminium backed silica gel 60 F254 plates with n-hexane-ethyl acetate, 7:4 (v/v) as a mobile phase. Under these experimental conditions the method was highly sensitive (the limit of detection was 14.2 μg) and recovery was satisfactory (from 94.46% to 97.24%). The result obtained during the method were confirmed in standardization of herbal syrups and tablets by quantification of isolated marker because high precision and accuracy were achieved.

RUG DEVELOPMENT

PP-46: Piperine augments the steady-state pharmacokinetics of Carbamazepine and Phenytoin in patients of epilepsy
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Objective: To investigate the effect of a single dose of piperine (the active principle of Piper longum, Piper nigrum and Zingiber officinalis) in patients with uncontrolled epilepsy in the steady-state pharmacokinetics of phenytoin and carbamazepine.

Methods: Four groups of patients (n=10) receiving either phenytoin (150 mg or 200 mg BD) or carbamazepine (300 mg or 500 mg BD) were selected. Twelve hours following drug administration, venous blood samples were collected at 0, 0.5, 1, 2, 4, 6, 9, 12 h. Next day, 20 mg of piperine was administered along with phenytoin or carbamazepine and samples were collected similarly. The pharmacokinetic parameters were compared using Student’s t-test.

Results: Piperine significantly increased the mean plasma concentration of both doses of phenytoin at most time points. There was a significant increase in AUC (0-24h) (p < 0.01), Cmax (p < 0.001) and Kd (p < 0.05) whereas the changes in Ka and tmax were not significant. With carbamazepine, there was a significant increase in AUC (0-24h) (p < 0.001), average Cmax (p < 0.001), t1/2d (p < 0.05) and a decrease in Kd (p < 0.05), in both the dose groups, whereas changes in Ka and tmax were not significant. The Cmax (p < 0.01) and tmax (p < 0.01) were increased significantly following piperine administration in the 500 mg dose group; however, these parameters were not significant in the lower dose group.

Conclusion: The results showed, piperine significantly enhanced the oral bioavailability of phenytoin and carbamazepine and may enhance their toxicity.