

PHARMACEUTICAL AND ANALYTICAL STUDY OF HERBAL DEODORANT “SEVYA” AEROSOL FORMULATION BY USING AYURVEDIC DRUGS AND EVALUATION OF ITS ANTI- MICROBIAL ACTIVITY

*Priyanka Gomase, **Dr. Prashant Bedarkar, #Prof. B.J. Patgiri

*MD 2nd Year, **Associate Professor, #HOD

Department of Rasashastra & Bhaishajya Kalpana, IPGT & RA, GAU, Jamnagar.

ABSTRACT

Introduction: Ushira (Rhizomes of Vetiveria zizanioides), sariva (Rhizomes of Hemidesmus indicus) and Bilva patra (leaves of Aegle marmelos) are commonly used, found, aromatic drugs with wide spectrum therapeutic utility especially for skin disorders. Their alcoholic extract can be effectively used in modified dosage form of deodorant Aerosol formulation. Materials & method: Ethanolic extracts of Ushira (1:3), sariva (1:1.6) and Bilva patra (1:1.8) drug : solvent respectively were obtained through soxhlet extraction at Department of RSBK, IPGT & RA, Jamnagar. Extracts were mixed in the ratio of 2:1:1 and were formulated to deodorant Aerosol form “SEVYA”. The mixture of extracts was subjected to antimicrobial study at IAPS, Gujarat Ayurveda University, Jamnagar by Paper disc diffusion method (Kirby-Bauer Method). Inoculate of S. aureus, S. epidermidis and Salmonella on nutrient agar were incubated with discs soaked in test mixture at 37 °C for 24 hours. Result: here was 10mm zone of inhibition after 24 hrs. Conclusion: Mixture of ethanolic extracts of Ushira, sariva and Bilva obtained through soxhlet extraction in the ratio of 2:1:1 possess antimicrobial property against S. aureus, and S. epidermidis.

Keyword: Herbal deodorant, aerosol.

INTRODUCTION

The skin is the primary external coating of the human body. In adults, skin occupies approximately 2.4 square yards and because it is exposed to the environment, the skin is inhabited by number of bacteria. ‘Body odour’ is never a pleasant topic of conversation. Men, women and children from all walks of life use deodorants to cover up this natural

emanation. Antiperspirants are also used to try to prevent the formation of sweat (the more usual term for perspiration), which is responsible for the unpleasant smells we associate with perspiration. Most conventional deodorants and antiperspirants contain several ingredients. Ushira (Rhizomes of Vetiveria zizanioides), sariva (Rhizomes of Hemidesmus indicus) and Bilva patra (leaves of Aegle marmelos) are commonly used,

found, aromatic drugs with wide spectrum therapeutic utility especially for skin disorders. Their alcoholic extract can be effectively used in modified dosage form of deodorant Aerosol formulation.

MATERIALS&METHOD:

Ethanol extracts of Ushira (1:3), sariva (1:1.6) and Bilva patra (1:1.8) drug: solvent respectively were obtained through soxhlet extraction at Department of RSBK, IPGT & RA, Jamnagar. Extracts were mixed in the ratio of 2:1:1 and were formulated to deodorant Aerosol form "SEVYA". The mixture of extracts was subjected to antimicrobial study at IAPS, Gujarat Ayurved University, Jamnagar by Paper disc diffusion method (Kirby-Bauer Method). Inoculate of *S. aureus*, *S. epidermidis* and *Salmonella* on nutrient agar were incubated with discs soaked in test mixture at 37 °C for 24 hours.

RESULT AND DISCUSSION:

There was 10mm zone of inhibition after 24 hrs. In comprises the discussion of important points from conceptual study as well as the results obtained from pharmaceutical study. There has been an indication that while establishing or advancing any theory or opinion or a fact one should consider all the factors from all angles to the maximum possible extent. The exact nature of the problem is to be taken up for finding solution. Any theory or observation emerging from exhaustive classical and experimental study can only be accepted if there is proper reasoning based on observations. It is a bridge connecting the findings with conclusion; only a properly done discussion can fulfill the purpose of research work, i.e. to draw some conclusion from the findings and results. Therefore discussion is the main sub stream for any type of research work. Ayurveda, the science of the life, embodies both prevention as well as curative aspects of diseases, considering both the aims of equal importance. To fulfill the objectives; they have developed different dosage forms of drugs, the details of which can be discussed under the Rasashastra and Bhaishajya Kalpana. In due course of time this branch has become an integral part of Ayurveda.

Classics text reveals that, new formulations have been compounded, whenever need arises. Basically these innovations were made by the experiences of the seers. Innovation of a new formulation should fulfill the following points. Safe and least toxic. More effective. Economic. Palatable. Easily available and accessible. Convenient at all age groups. In this regard an attempt has been taken to standardize the formulation on pharmacognostical and analytical study was carried out of "Herbal Deodorant".

CONCLUSION:

Literal reviews of ancient Ayurvedic texts suggest profuse use of deodorant. Antiperspirant and related actions. It reveals many different dosage forms for these above cited actions. Direct reference of Aerosol, deodorant preparation is not found in ancient Ayurvedic literature. Process validation of Aerosol deodorant preparation for Ushir, Sariva & Bilva was done. Prepared Herbal deodorant complies with tests of the dosage form as per I.P. Analytical results showed presence of chemical constituents of ethanol extract of individual samples in finally prepared mixture of all extracts. No new chemical moiety as that of ethanol extract of individual drugs was identified in mixture of extract of drug. Prepared Herbal Deodorant showed antimicrobial properties against *S. aureus*, and *S. epidermidis*.

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