

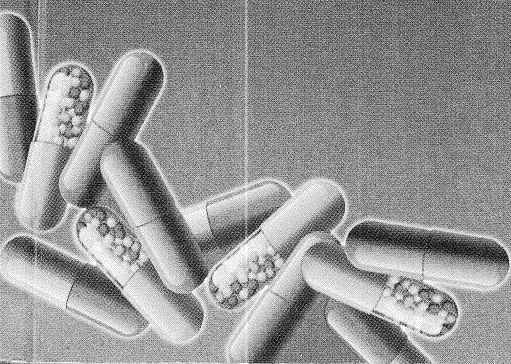
The SCIENTIFIC SESSIONS 2017

“Building Bridges for Better Health”

Faculty of Medical Sciences, University of Sri Jayewardenepura
in collaboration with
Colombo South Teaching Hospital
Sri Jayewardenepura General Hospital
Base Hospital, Homagama

Book of Proceedings

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Objectives: Our objective was to assess Sri Lankan patients' perspective with regard to this scenario.

Methods: We involved 141 consenting patients presenting to the OPD, National Hospital with a venous ulcer lasting one month or more. Data was collected using an interviewer administered questionnaire, a clinical interview and a lower limb duplex scan. Short form 36 questionnaire was used for QoL assessment.

Results: The majority were elderly (median age 53 years) men (n=9[69.5%]). Fifty four (38.3%) were unemployed at the time of the study and 28 (19.9%) directly attributed the ulcer as the cause for unemployment. Median duration of ulcer was 10[1-360] months and mean Venous Clinical Severity Score (VCSS) was 13.85(4-24). Family history (44[31.2%]), previous limb trauma or non-venous surgery (24[17.0%]), smoking among men (57 [58.2%]) and history of pregnancy among females (34[79.1%]) were identified as risk factors. Role limitation due to physical health (28.4[SD 42.8]) and role emotional problems (40.9 [SD 46.7]) had a mean SF 36 score below 50. Factors such as pain, duration of ulcer, older age and higher BMI significantly affected many domains of QoL (p<0.05). Sixty six (46.8%) patients continue to have ulcers despite having had surgical treatment for varicose veins.

Conclusions: Venous ulcers have a considerable impact on the quality of life in Sri Lankan patients with venous ulcer. The need for providing preventive and rapid healing methods together with social support must be emphasized.

OP 7

***In-vitro* antimicrobial efficacy of Sri Lankan bee honey against microorganisms causing chronic wounds**

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Objectives: To evaluate the *in-vitro* efficacy of Sri Lankan bee honey as an antimicrobial agent against pathogens causing chronic wounds.

Methods: Standard strains of 4 bacterial and 4 fungal species and fourteen bacterial isolates from chronic wounds were tested against twelve honey types belonging to seven Agro Ecological Regions (AERs). Antibacterial activity was determined by agar well diffusion, phenol equivalent methods and Minimum Inhibitory Concentration (MIC) by agar dilution.

Results: 6/12, 5/12, 11/12 and 11/12 honeys gave inhibitory zones ranging 12.5-19.5 mm for *Staphylococcus aureus* (ATCC-25923), *Escherichia coli* (ATCC-25922), *Pseudomonas aeruginosa* (ATCC-27853) and *Klebsiella pneumoniae* (ATCC-700603) respectively. All ATCC strains had MIC of 10-20%. Out of six selected honeys, four gave therapeutic level activity for all tested clinical isolates except for *Pseudomonas aeruginosa*. Phenol equivalence values ranged 12-18% and 14-28% (w/v) for tested gram negative and positive bacterial species respectively. Honey originated from low country regions reported phenol equivalence of 11-20% and superior activity against multidrug resistant bacteria. Commercially available honey reported lowest antibacterial activity with 5-10% phenol equivalence against 11/14 isolates. No inhibitory zones were observed for fungal species and MIC was >40% for all types of honey.

Conclusions: Sri Lankan bee honey exhibits significant antibacterial activity against both gram positive and negative bacteria including multidrug resistant organisms *in-vitro*. Antibacterial potency varies in different types of honey from different AERs. Low country honey was superior to others while antibacterial activity of commercially available honey was negligible. None of the honeys had antifungal activity against *Candida* species.