Antibacterial activity of *Maha Thuwāla Thaila* against laboratory specimens of *Staphylococcus aureus*: an experimental study

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Abstract

Ayurveda and indigenous herbal preparations are used in the treatment of various types of infectious wounds. They are composed of many herbs which naturally contain anti-microbial compounds. They can be effectively used against bacterial and fungal infections. Maha Thuwāla Thaila is a medicine for external application which is mostly used in indigenous medicine in Sri Lanka to cure chronic wounds, cut-injury wounds, orthopedic wounds and burned wounds. In addition, this oil preparation is clinically used in orthopedic treatment (Sandi Baghna Cikitsa) to cure Sandi Baghna. It consists of many herbs, oils, spices and minerals which have a number of anti-bacterial and anti-fungal compounds. Generally, all types of skin wounds are colonized by various types of bacteria. Common among these bacteria types is Staphylococcus aureus which is considered the classic opportunist bacteria which takes advantage of broken skin or other entry sites to cause an infection. But efficacy of this oil against Staphylococcus aureus in wounds is not scientifically evaluated. The purpose of this study was to evaluate tthe ant-bacterial activity of Maha Thuwāla Thaila against the laboratory specimen of Staphylococcus aureus by using Anti-bacterial Susceptibility Test (ABST). In this study Amoxicillin (5 mg/ml) was used as a positive control. The tested oil sample has shown 8.83 mm mean inhibitory zone diameter while positive control showed 39.33 mm of mean diameter. This result concludes that the tested samples of Maha Thuwāla Thaila showed less significant anti-bacterial activity against the laboratory specimens of Staphylococcus aureus bacteria under these laboratory conditions.

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