Alternative Medicines in the Treatment of MRSA and Staphylococcus aureus

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The purpose of this project was to explore alternatives to commercially manufactured antibiotics. This experiment was meant to test if natural alternative medicines, honeys, and herbal essential oils, can be effective for the clinical treatment of MRSA and Staph. aureus. If a substance's zone of inhibition is the largest sampled, then it has the greatest likelihood of clinical effectiveness. Research has shown that honey and essential oils have been used in many different cultures throughout human history. From the ancient Egyptians to modern Americans, honey has been considered medicinal. Through previous experimentation and research using secondary resources the essential oils tested were determined to have the most potential. Experimentally, the process to test these substances took forty-eight hours. Each substance was plated on an agar which was harvesting bacteria and after the incubation period, zones of inhibition were measured. This experiment provided strong proof of concept for using natural alternatives rather than manufactured antibiotics. Although commercial antibiotics proved most effective, essential oils and honey also proved to possess strong antibacterial properties. Herbal essential oils proved slightly more effective than honeys as an antibacterial agent, however both were strong enough to recommend for further research. Our experiments supported that commercial antibiotics show the greatest effectiveness, followed by herbs and finally the honeys.

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