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### **Effect of honey bee venom on *Candida albicans* in comparison with ketoconazole amphotericin B**

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**Statement of the Problem:** The *Candida* species are the most important factors of fungal infections in humans and animals. Due to resistance to anti-fungal drugs and side effect, honey bee venom is considered as an antimicrobial material.

**Methodology & Theoretical Orientation:** At first, the venom was gathered by electric shocks and its antimicrobial properties were examined using disk diffusion method. MIC and MBC were calculated on *Candida albicans* compared with ketoconazole and amphotericin B in 24, 48 and 72 h. Then MIC, MFC and IZ between the venom and the drugs were calculated using ANOVA method and mean comparison was done using Tukey method.

**Findings:** Results showed that different venom concentrations possess inhibitory effect on *C. albicans* and MIC and MFC were calculated 24 and 28 µg/mL respectively, comparison between the venom and two antifungal drugs also showed that the venom has low effect in given concentrations. A meaningful difference was observed between ketoconazole and amphotericin B in 0.05 levels.

**Conclusion & Significance:** Results showed that honey bee venom possess antimicrobial properties on *Candida albicans*. So, more accurate toxicology examinations and derivation of compositions can help us to formulate new natural antibiotics.

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