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Title: Multidrug-resistant *Staphylococcus* bacteria isolated from pregnant women and the antimicrobial effect of Lantana camara L. different extracts

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Abstract

Isolation of fifteen *Staphylococcus* bacteria was made from pregnant who had vaginitis and the susceptibility to antibiotics (unictam, amoxicillin, biomox, oxytetracycline, suprax, xithrone, and augmentin) from these isolates was tested. The least activity against bacteria was recorded for amoxicillin, the resistance of some bacterial isolates was screened for most antibiotics, but there were two bacterial isolates designated as B6 and B11 that resisted all antibiotics. B6 and B11 were identified as *Staphylococcus epidermidis* NBRC 100911 and *Staphylococcus aureus* S33 R using16S rRNA gene sequencing. Antimicrobial and antioxidant impact of *Lantana camara*'s methanol (ME), ethyl acetate (EE), and chloroform (CE) leaves extracts have been examined. Antimicrobial activity was evaluated by the disc diffusion method, zone inhibition, and minimum inhibitory concentration (MIC). Using CE and ME extracts, MIC for both bacterial types was 6.25 mg/mL and was 12.5 mg/mL using EE extract. Phenolic compounds investigation by HPLC showed nine different compounds, but not all of them exist in all extracts. Eight compounds for ME and CE extracts were screened showing high percentages of caffeic acid and quercetin and only seven compounds for EE extract. The total phenolic content (TPC) was estimated under spectrophotometric conditions and supported our HPLC findings. In this article, antimicrobial tests revealed similar activities for ME and CE extracts against the multidrug-resistant (MDR) staphylococci bacteria.

KEY WORDS: MDR *Staphylococcus* sp., *Lanta camara*, Antibacterial activity.