

THE POTENTIAL ANTI HELICOBACTER PYLORI AND ANTIOXIDANT EFFECTS OF ARTEMISIA JUDAICA

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Background

Artemisia judaica (*AJ*) is one of the common species of the genus *Artemisia* that grows in Saudi Arabia desert and Sinai, Egypt where animals graze on it. It is widely used in traditional medicine and by Bedouins there. (*AJ*) has anthelmintic, antibacterial, antiinflammatory, analgesic and antipyretic effects.

Objective

The present study aimed to (1) elucidates the antibacterial action of *AJ* against *H. pylori* and different other bacterial species (2) measure the trolox equivalent antioxidant capacity (TEAC) of the *AJ* water extract.

Methods

Preparations of the (*AJ*) extracts were done by three different methods two of them are usually performed by population in Middle East by boiling of the shade-dried herb in water as tea (decoction), or soaked in tap water for over night (infusion), other method was done by concentrating the aqueous extract of *Artemisia judaica* under vacuum. The antibacterial action of *AJ* against *H. pylori* and different other bacterial species compared to tetracycline and cefotaxime was measured. Also the trolox equivalent antioxidant capacities (TEAC) of the *AJ* extracts were determined.

Results

The results of this study revealed that (*AJ*) has neither antibacterial effects neither against *H. pylori* nor any other bacterial species. On the other hand the extract of *AJ* prepared by any of the above mentioned methods showed significant ($p < 0.005$) antioxidant action as compared with blank and related to trolox antioxidant capacity.

Conclusion

Our study demonstrated that (*AJ*) water extracts prepared by any of the above mentioned methods has a considerable antioxidant capacity. However, these extracts have neither antibacterial effects neither against *H. pylori* nor any other bacterial species.