



بطاقة البحث الأول بحث مشترك منشور (غير مستتب من رساله)

النشاط المضاد للأكسدة قد يشير إلى نوع من التحسن بعد علاج مرضى داء الجرب

Antioxidant activity may signify a kind of improvement following treatment of scabietic patients

Abstract:

Sarcoptes scabiei infestation is a common skin disorder of variable severity. The pathogenesis and disease outcome are based on the interplay between the mite population and activity, and the host defense mechanisms. The aim of this study was to assess the systemic levels of oxidative stress markers among 25 cases suffering from resistant scabies due to treatment failure, in comparison to 25 effectively recovered subjects after treatment. Clinical and microscopic examinations were performed, and blood samples were collected for the detection of anti-*Sarcoptes scabiei* IgG, oxidative stress markers (NO, SOD and GST), and WBCs count. No mite stages were detected by microscopic examination of scrapings. The mean of the anti-*Sarcoptes scabiei* IgG OD level in the resistant group was significantly higher than in the recovered group. Regarding oxidative stress biomarkers, plasma NO level was significantly higher in the resistant group, while levels of SOD and GST were significantly elevated in the recovered group.

A statistically significant increase in total WBCs count was detected in the resistant group with variable differential count. In conclusion, oxidative stress is a vital process that can affect the pathogenesis and the severity of scabies, hence oxidative stress markers can provide a valuable prognostic tool for disease follow-up. The implication of oxidative stress in disease progression highlights the possible role of antioxidants in management of scabies in addition to the anti-mite treatment.

Key words: *Sarcoptes scabiei*- oxidative stress - prognostic biomarkers.