Determination the Level of Complement Protein C3 and C4 in Gastric Ulcers Patients in Baqubah City, Iraq

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Abstract

Background: Gastric ulcer is common and serious diseases caused by imbalances between naturally occurring defensive factors such as mucus, prostaglandins and aggressive factors such as hydrochloric acid, usually found in gastrointestinal juices.

Objective: To evaluated the level of complement protein C3 and C4 for infected patients with gastric ulcer in Baqubah city, Iraq.

Patients and Methods: In this case-control study (57) blood samples were collected from patients with gastric ulcer and (32) blood samples from healthy individuals has been accredited as a control group and the study has continued during the period between October 2016 and April 2017.

Results: The results showed that there was a decrease in the level of C3 in patients with gastric ulcers by (25.168 ± 182.173) mg/dl compared to the control group and (501.565 ± 481.418) mg/dl and found that an increase in the level of C4 in patients with gastric ulcer was (34.978 ± 91.252) mg/dl compared to control group and (7.493 ± 17.403) mg/dl in (p value < 0.001).

Conclusion: We conclude from this that the complemental protein plays an important role in the localized response to gastric ulcer and gastrointestinal diseases. The presence of neutrophil cells leads to an increase in the production of the C4 complement in patients and that IL-10 has a role in regulating the complemental product in general.

Key words: Complement Protein, C3 and C4, Gastric Ulcer.

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