# The Relationship Between Diabeteus Mellitus And Acalculous Cholestitis Among Elderly Patients

TURGUT DOLANBAY<sup>1</sup>, Levent Sahin<sup>2</sup>, Huseyin Fatih Gul<sup>1</sup>, Murat Aras<sup>3</sup>, Eray Atalay<sup>3</sup>, Gizem Gecgel Aras<sup>3</sup>, Turgut Anuk<sup>3</sup>, Multehan Evran<sup>4</sup>, and Ilker Akbas<sup>5</sup>

<sup>1</sup>Kafkas University
<sup>2</sup>Kafkas University Faculty of Medicine
<sup>3</sup>Kafkas Universitesi
<sup>4</sup>Şanhurfa İl Sağlık Müdürlüğü
<sup>5</sup>Kahramanmaras Sutcu Imam Universitesi

April 05, 2024

## Abstract

Abstract Background: The clinical picture of acute acalculous cholecystitis can be observed in a wide range from mild lesions to a degree threatening the patient's life due to serious complications. In this study, we aimed to investigate the relationship between patients with acalculous cholecystitis and diabetes mellitus (DM) that has serious complications. Methods: The demographic varibles of patients such as age, gender along with blood tests, were gathered from 110 patients were gathered. The acalculus cholecystitis patients were divided into two groups of DM (DM+) and non DM (DM-) acalculus cholecystitis patients. Descriptive statistics for numerical variables were presented as mean, standard deviation, median, min-max values. Non-parametric test procedures were conducted for on non-normally distributed data. In this context, the non-parametric alternative of the independent sample t-test, the Mann-Whitney U test, was used to determine the the difference between means of each group. Perason correlation analysis was used to test the correlation between continuous variables and chi-square analysis was performed to evaluate the relationship between categorical data. Results: The overall analyses revealed that there was a positive correlation between CRP and AST, CRP and ALT, CRP and GGT, ALT and GGT in DM+ patients. The results also indicated that gender is not a significant factor for the relationship between DM and acalculous cholecystitis. Conclusions: It can be said that advanced age and the presence of DM increase the risk of acalculous cholecystitis and blood parameters used to show the presence of infection. Furthermore, deterioration in liver function tests increases more in DM patients.

## The relationship between diabeteus mellitus and acalculous cholestitis among elderly patients

#### Abstract

**Background** :The clinical picture of acute acalculous cholecystitis can be observed in a wide range from mild lesions to a degree threatening the patient's life due to serious complications.In this study, we aimed to investigate the relationship between patients with acalculous cholecystitis and diabetes mellitus (DM) that has serious complications.

**Methods:** The demographic variables of patients such as age, gender along with blood tests, were gathered from 110 patients were gathered. The acalculus cholecystitis patients were divided into two groups of DM (DM+) and non DM (DM-) acalculus cholecystitis patients. Descriptive statistics for numerical variables were presented as mean, standard deviation, median, min-max values. Non-parametric test procedures were conducted for on non-normally distributed data. In this context, the non-parametric alternative of the independent sample t-test, the Mann-Whitney U test, was used to determine the the difference between

means of each group. Perason correlation analysis was used to test the correlation between continuous variables and chi-square analysis was performed to evaluate the relationship between categorical data.

**Results:** The overall analyses revealed that there was a positive correlation between CRP and AST, CRP and ALT, CRP and GGT, ALT and GGT in DM+ patients. The results also indicated that gender is not a significant factor for the relationship between DM and acalculous cholecystitis.

**Conclusions:** It can be said that advanced age and the presence of DM increase the risk of acalculous cholecystitis and blood parameters used to show the presence of infection. Furthermore, deterioration in liver function tests increases more in DM patients.

Keywords : Acalculous Cholecystitis, Blood Tests, Chronic Diseases, Diabetes Mellitus, Inflammation

### Hosted file

manuscr\selectlanguage{polish}i\selectlanguage{english}pt.docx available at https: //authorea.com/users/733424/articles/711123-the-relationship-between-diabeteus-mellitusand-acalculous-cholestitis-among-elderly-patients

## Hosted file

TABLES.docx available at https://authorea.com/users/733424/articles/711123-the-relationshipbetween-diabeteus-mellitus-and-acalculous-cholestitis-among-elderly-patients