

**RESULTS**

In the first group, the mean BG level was 172 mg/dL, the second group was 771.83 mg/dL, the third group was 281.17 mg/dL, the fourth group was 518.50 mg/dL, the fifth group was 191.67 mg/dL, and in the sixth group was 223.83 mg/dL. The results of histological examination of the pancreas in the first group showed no necrosis and no edema, the second group had severe pancreatic damage with ample empty space, the third group had necrosis of the pancreas but the percentage of area was relatively reduced and narrower, the fourth group also had necrosis, the fifth group has begun to see tissue repair, and in the sixth group islet space is almost invisible.

**CONCLUSION**

SF extract has a significant effect on the decrease in BG levels seen at a dose of 125 mg /kg bw.

**KEY WORDS**

spatholobus ferrugineus, antidiabetic drug, pancreas histology

**OA-D-19**

### THE RELATIONSHIP BETWEEN INSULIN USAGE ADHERENCE AND FEMALE SEXUAL DYSFUNCTION IN TYPE 2 DIABETES MELLITUS PATIENTS IN RSUD CUT MEUTIA NORTH ACEH

<https://doi.org/10.15605/jafes.034.02.S37>

**Maulina Debbyousha,<sup>1,2</sup> Hendra Zufry,<sup>1</sup> Krishna Sucipto,<sup>1</sup> Harvina Sawitri,<sup>3</sup> Suhaemi Siregar,<sup>2</sup> M. Jailani Alfajri,<sup>3</sup> Erwin Siregar<sup>3</sup>**

<sup>1</sup>Endocrinology, Metabolism and Diabetes- Internal Medicine Department, School of Medicine Universitas Syiah Kuala/ Dr. Zainoel Abidin General Teaching Hospital, Banda Aceh, Indonesia

<sup>2</sup>Internal Medicine Department, School of Medicine Malikussaleh University/RSU Cut Meutia North Aceh, Indonesia

<sup>3</sup>School of Medicine Malikussaleh University, Indonesia

**INTRODUCTION**

A normal sexual health is an important part of life and relationship, it affects overall quality of life, physical and emotional health. Sexual dysfunction is one of the complications in patients with Type 2 Diabetes Mellitus (T2DM). Female sexual dysfunction is more difficult to diagnose and treat because of the intricacy of female sexual response. Insulin usage adherence is an important issue of T2DM treatment, ineffective insulin therapy contributes to poor glycemic control and places patients at risk of complications. This research was carried out in North Aceh, one of the districts in Aceh that applied Islamic sharia. Female sexual function is an issue that is rarely discussed in North Aceh.

**METHODOLOGY**

This study was an observational study with cross-sectional approach. Data were analysed with chi square statistical test, using statistic software and obtained with interview. Female sexual dysfunction was measured by using Female Sexual Function Index (FSFI) -9 items. Insulin usage adherence was measured by using Morinsky Insulin Adherence Scale.

**RESULTS**

There were 39.3% respondents who had high adherence, 30.3% respondents had medium adherence, and 30.3% respondents had low adherence. There were 54.5% respondents who had sexual dysfunction and 45.4% didn't have sexual dysfunction. Statistical paired chi square with  $\alpha$  0.05 indicated that there was association between insulin usage adherence and female sexual dysfunction in T2DM patients (*p value* = 0.008).

**CONCLUSION**

There was a significant relationship between insulin usage adherence and female sexual dysfunction in T2DM patients.

**KEY WORDS**

diabetes mellitus, insulin, female sexual dysfunction

**OA-D-20**

### CORRELATION OF HBA1C LEVELS AND HEALING RATE OF LOWER EXTREMITY INFECTION IN PATIENTS WITH DIABETES: A RETROSPECTIVE STUDY

<https://doi.org/10.15605/jafes.034.02.S38>

**Justiene Mia Klarisse Danga and Perie Adorable-Wagan**

Section of Endocrinology, Diabetes and Metabolism, Department of Internal Medicine, The Medical City, Pasig City, Philippines

**INTRODUCTION**

Despite better knowledge of complications of lower extremity infection and efforts to improve prevention of foot ulcers; there has been no established level of HbA1c identified in treatment of lower extremity infection in diabetes.

**METHODOLOGY**

Retrospective cohort study of 74 patients admitted from 2013 to 2016 for which electronic data were retrieved from the Records section and Wound Care Center of The Medical City. Parameters such as HBA1C, wound size, University of Texas Classification, length of hospital stay and follow up were documented to establish outcome of the study.

**RESULTS**

49% of patients have HbA1c of 8.0% and above, with hospital stay of less than 8 days (64%), had antibiotics for less than 15 days (53%), had wound debridement (67%), and experienced wound healing for 14 days or less. Fisher's Exact Test at 5% level of significance showed that HbA1c is significantly correlated with the mean duration of healing, duration of antibiotics and wound debridement. HbA1c of 8.0% and higher presents a higher risk of longer antibiotic use (odds ratio 3.99), higher risk of wound debridement (hazard ratio 5.60) and longer healing time (hazard ratio 2.0).

**CONCLUSION**

Patients with HbA1c of more than 8.0% had prolonged healing time, higher risk to undergo wound debridement and longer duration of antibiotics. We highly recommend a strict level of glycemic control specifically to populations who are at risk to develop lower extremity infections such as those with peripheral artery disease and with previous history of lower extremity infection.

**KEY WORDS**

healing rate, lower extremity infection, hba1c, diabetes

**OA-D-21**


---

**TYPES OF INFECTIONS THAT  
PREDISPOSE PATIENTS WITH DIABETES  
TO DIABETIC KETOACIDOSIS IN A  
REGIONAL HOSPITAL IN HONG KONG**

<https://doi.org/10.15605/jafes.034.02.S39>

**Ka Shing Yan**

*Endocrine Team, Department of Medicine, Pamela Youde Nethersole Eastern Hospital, Hong Kong*

**INTRODUCTION**

Diabetic ketoacidosis (DKA) is one of the most severe acute complications of diabetes mellitus (DM), and infection is one of the most common triggers. There are not many studies in Hong Kong to find the types of infections that predispose patients with diabetes to DKA.

**METHODOLOGY**

This retrospective case control study was conducted in a regional hospital in Hong Kong on 100 hospitalized patients with diabetes. Patients with diabetes were classified as with or without DKA, and each group consisted of 50 patients. Infection was either clinically or microbiologically documented. Infection with potential to trigger DKA was identified. Clinical and biochemical characteristics of patients with or without DKA were also analyzed. Statistical analysis was performed using Statistical Package for the Social Sciences (SPSS) software.

**RESULTS**

Younger age ( $p=0.001$ ), newly diagnosed DM ( $p=0.029$ ), higher white cell count ( $p<0.001$ ), presence of pancreatitis ( $p=0.042$ ) and isolation of *Streptococcus* from cultures ( $p=0.022$ ) were significantly more frequent in patients with DKA than those without DKA by univariate analysis. Multivariate analysis showed that younger age (odds ratio, 0.95: 95% confidence interval, 0.92-0.98) and higher white cell count (odds ratio, 1.188, 95% confidence interval, 1.071-1.318) were independently associated with DKA.

**CONCLUSION**

Pancreatitis ( $p=0.042$ ) and *Streptococcus* infection ( $p=0.022$ ) were significantly more frequent in patients with DKA than those without DKA by univariate analysis, though could not reach statistical significance after multivariate analysis. Higher white cell count was independently associated with development of DKA. Aggressive management is needed to improve the survival of patients with DKA. Younger age is also independently associated with DKA. One of the reasons can be due to the association of DKA with newly diagnosed DM in which the usual onset time is relatively younger. Education of DM symptoms to the public with an effective screening program for DM is needed.

**KEY WORDS**

diabetic ketoacidosis, infection, association