Immediate Preoperative Blood Glucose and Hemoglobin A1c Levels are not Predictive of Post-operative Infections in Diabetic Men Undergoing Penile Prosthesis Placement

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Introduction

- The goal of our study is to assess whether pre-operative blood glucose levels and pre-operative hemoglobin A1c (HbA1c) levels are associated with post-operative infection.

Methods

- Retrospective chart review of 758 diabetic patients undergoing primary penile prosthesis placement from April 2003 to May 2018
- Primary outcome was postoperative infection and secondary outcomes were revision and explantation rates.
- Blood glucose levels within 6 hours of surgery and HbA1c levels were measured and assessed as continuous and categorical variables (75th and 90th percentile thresholds).

Results

- Infection: 4.1%, Revision: 6.0%, and Explantation: 4.5%

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	Control (n=730)		Infection (n=28)		
	Mean	SD	Mean	SD	p
Age (years)	60.82	8.75	57.61	10.11	0.058
BMI	31.23	5.61	31.47	7.56	0.839
Preoperative Blood Glucose	148.70	49.91	136.50	44.41	**0.180**
Preoperative HbA1c Levels	7.40	1.44	7.62	1.33	**0.546**
Charlson Comorbidity Index	3.78	1.77	3.75	1.74	0.933

Conclusions

- Neither pre-operative blood glucose levels nor HbA1c levels were associated with post-operative infection, revision, or explantation rates.
- Patients with a history of DM-related complications were found to be at a significantly increased risk of post-operative infection.

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