

# **Dental implants in medically complex patients- a retrospective study.**

[Manor Y<sup>1,2</sup>](#), [Simon R<sup>3</sup>](#), [Haim D<sup>4</sup>](#), [Garfunkel A<sup>4</sup>](#), [Moses O<sup>5</sup>](#).

## **Author information**

### **Abstract**

#### **INTRODUCTION:**

Dental implant insertion for oral rehabilitation is a worldwide procedure for healthy and medically compromised patients. The impact of systemic disease risks on the outcome of implant therapy is unclear, since there are few if any published randomized controlled trials (RCTs).

#### **OBJECTIVE:**

The objective of this study is to investigate the rate of complications and failures following dental implantation in medically compromised patients in order to elucidate risk factors and prevent them.

#### **MATERIAL AND METHODS:**

A retrospective cohort study was conducted from patient files treated with dental implantation between the years 2008-2014. The study group consisted of medically complex patients while the control group consisted of healthy patients. Preoperative, intraoperative, and post operative clinical details were retrieved from patients' files. The survival rate and the success rate of the dental implants were evaluated clinically and radiographically.

#### **RESULTS:**

A total of 204 patients (1003 dental implants) were included in the research, in the study group, 93 patients with 528 dental implants and in the control group, 111 patients with 475 dental implants. No significant differences were found between the groups regarding implant failures or complications. The failure rate of dental implants among the patients was 11.8 % in the study group and 16.2 % in the control group ( $P = 0.04$ ). It was found that patients with a higher number of implants (mean 6.8) had failures compared with patients with a lower number of implants (mean 4.2) regardless of their health status ( $P < 0.01$ ).

#### **CONCLUSIONS:**

We found a similar rate of failure and complications of dental implantation in medically complex patients and in healthy patients.

#### **CLINICAL RELEVANCE:**

Medically complex patients can undergo dental implantation. There are similar rates of complications and failures of dental implants in medically complex patients and in healthy patients.

**KEYWORDS:**

Dental implant failure/survival; Medically complex patients

PMID:

27604233

DOI:

[10.1007/s00784-016-1937-6](https://doi.org/10.1007/s00784-016-1937-6)