

## **Risk factors of peri-implant mucositis and its prevention**

*Helmizadeh Maha*

*Belarusian State Medical University, Minsk*

*Tutor(s) Rossenik Nadezhda Ivanovna, Belarusian State Medical University, Minsk*

### **Introduction**

Nowadays dental endosseous implant is a widely recognized treatment option for replacing missing teeth. Dental implants have been reported to achieve long-term success in many clinical cases. However, 50% of patients experience some level of complications and peri-implant mucositis is a frequent finding.

### **Aim**

The aim of the current research was to determine the main risk factors leading to peri-implant mucositis and to develop guidelines on its prevention.

### **Materials**

The objects of the research were 20 patients aged 35–44 years with peri-implant mucositis. The questionnaire comprised questions on medical and dental history, home care and oral hygiene skills. Recall peri-implant examination included OHI-S (Green, Vermillion, 1964), GI (Loe, Silness, 1963), bleeding on probing (BoP+%) and mucosal recession (mm). Clinical parameters were assessed at four surfaces (mesial, buccal, distal and lingual) of each implant. The obtained results were documented in special charts.

### **Results**

The main factors leading to peri-implant mucositis are poor oral hygiene (98%), history of periodontitis (74%), uncontrolled diabetes mellitus (27%), smoking (79%), genetic profile (63%), and improper posttreatment maintenance therapy (96%). We have explored that bruxism (43%) and occlusal overload (57%) lead to inflammation around the implant surface. Nevertheless, the iatrogenic factors include non-parallel adjacent implants (35%), the presence of gap between the fixture and prosthetic components (54%), as well as the presence of residual cement (36%) subgingivally.

### **Conclusions**

Periodontal maintenance protocol together with the improvement of oral hygiene play a key role in plaque-induced mucositis prevention. The informative brochure about oral hygiene in the area of dental implants was developed for patients with peri-implant mucositis.