ANALYSIS OF COMPLICATIONS ARISING DURING PROSTHETICS WITH FIXED CONSTRUCTIONS OF DENTAL PROSTHESES FIXED ON TWO-STAGE OSTEOINTEGRATED SCREW IMPLANTS, THEIR ELIMINATION AND PREVENTION

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Abstract: In the article, based on ten years of experience in prosthetics with fixed orthopedic structures on osseointegrated two-stage screw implants, the nature and frequency of complications arising during prosthetics were determined, methods for their elimination were proposed, and practical recommendations for the prevention of complications were given.

Key words: implant, prosthetics, complications.

Relevance. Recently, the number of patients who have had osseointegrated two-stage screw implants installed has been growing, and the number of fixed structures on them has been growing accordingly [1].

However, recently there has been an increase in complications arising from the long-term functioning of fixed orthopedic structures fixed on osseointegrated screw implants [26].

Goal and tasks. The purpose of our work was: to improve the quality of orthopedic care for patients who underwent implantation surgery using a two-stage technique with osseointegrated cylindrical implants.

on the basis of clinical experience, the nature and frequency of complications arising during prosthetics with fixed orthopedic structures fixed on intraosseous two-stage cylindrical osseointegrated implants was determined; determine the time of onset of complications after prosthetics and develop methods for their elimination;

develop practical recommendations for the prevention of complications.

During the period 2018-2022, we manufactured non-removable orthopedic structures

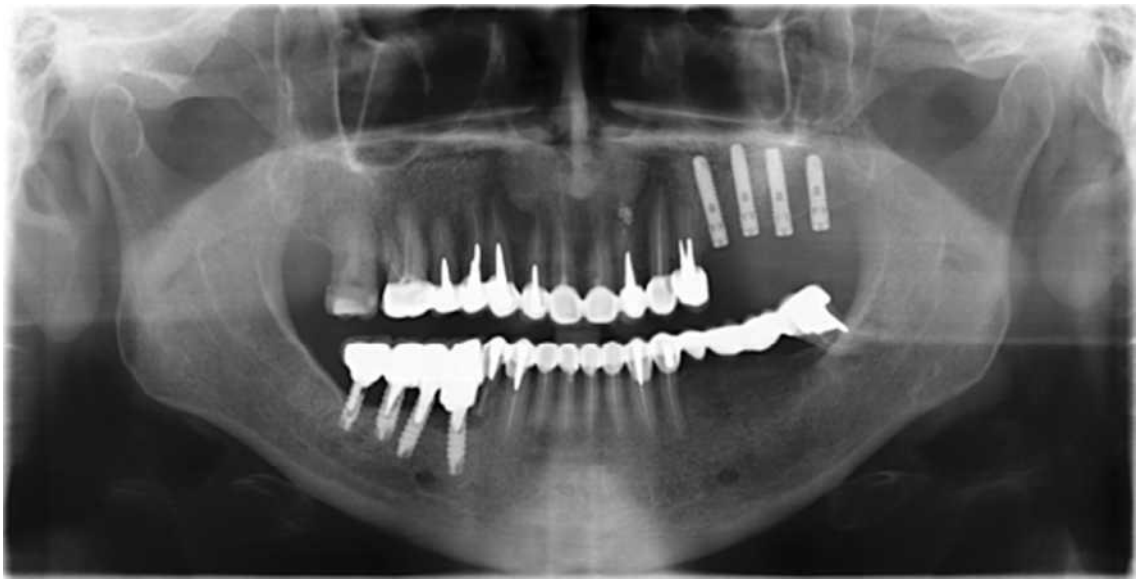
on 25 osseointegrated two-stage cylindrical implants.

During this period, 11 patients came to us with orthopedic complications, who had 22 implants installed, of which complications arose in orthopedic structures on 9 implants. Thus, the total percentage of orthopedic complications was 8.15% of the total number of installed implants on which permanent orthopedic structures were made

Eliminate complications. The mobility of the orthopedic structure, associated with the loosening of the fixing screw connecting the implant to the abutment , was eliminated in eight cases by removing the structure by sawing, unscrewing the screws, replacing them, and then making a new orthopedic structure using a generally accepted method. Replacing the screw was necessary due to its possible curvature, since strong mobility of the entire structure was observed; in four cases, removal of the orthopedic structure was carried out without violating its integrity using the Kop apparatus, since its mobility was extremely insignificant, and the crowns were fixed with special cement.

The most serious complication, in our opinion, is the breakage of the screws connecting the abutment to the implant.

In all 2 cases, it was not possible to unscrew the remaining screws. It was decided to drill out the remaining screws and make stump inlays for their CHS using a combined method, followed by the manufacture of a new orthopedic structure (Fig.).



Rice. CCS inlays are made in four implants on the right with a fixed orthopedic structure on them.

When the screw connecting the implant to the abutment was completely unscrewed, in 7 cases we perforated the crown, which provided access to the screw with a screwdriver, installed structures, tightened the screw, and then closed the perforation hole with polymer materials or amalgam. In 7 similar cases, the crown was removed from the abutment by sawing it, the screw was replaced, and a new crown was made using generally accepted methods.

In case of decementing of the crowns from the abutment , the abutment with an irrational angle of inclination was replaced with the required one, followed by the manufacture of a new design.

Thus, based on the above, it is necessary to follow the following recommendations in order to prevent complications during prosthetics with non-removable structures on two-stage cylindrical osseointegrated implants:

- guide the patient to see a doctor as quickly as possible if a problem is detected in the structures;
- To fix fixed structures, use lateral fixing screws, since this makes it possible to remove the structure without violating its integrity with subsequent access to the screw connecting the implant to the abutment .
- Correct the occlusal surface of the structure very carefully to avoid functional overload.

Thus, by following these recommendations, as well as with the further development of new denture designs, it is possible to reduce the number of complications arising

for prosthetics with fixed orthopedic structures on two-stage osseointegrated cylindrical implants.

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