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STUDY OF THE FUNCTIONAL EFFICIENCY OF FIXED BRIDGE PROSTHESES ON DENTAL IMPLANTS

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The functional efficiency of fixed bridge prostheses on dental implants is a critical factor in the long-term success and patient satisfaction with implant-supported restorations. This thesis explores the biomechanical performance, patient outcomes, and long-term durability of bridge prostheses fixed on dental implants, focusing on factors such as occlusal load distribution, prosthetic design, and the impact on surrounding tissues.

1. **Load Distribution and Biomechanics:**

o Bridge prostheses supported by dental implants must distribute occlusal forces evenly across the implants to prevent overloading, which can lead to implant failure or bone loss. Proper biomechanical design, including the number of implants used and their placement, is essential for optimal load management.

o The absence of periodontal ligament in implants means that forces are transferred directly to the bone, increasing the importance of precise occlusal adjustments to prevent complications.

2. **Prosthetic Design and Stability:**

o The design of the bridge, including factors such as material choice, span length, and abutment positioning, plays a significant role in the prosthetic's functional efficiency. Incorrect design may lead to mechanical failures such as screw loosening, fracture, or misfit, impacting the stability of the prosthesis.

o The choice between cement-retained and screw-retained bridges can also influence the ease of maintenance and the risk of biological complications.

3. **Impact on Surrounding Tissues:**

o Proper integration of the prosthesis with peri-implant soft tissues is crucial for maintaining tissue health. Poor adaptation of the prosthetic margin can result in inflammation, leading to peri-implant mucositis or peri-implantitis, which can compromise the longevity of the bridge.

o Long-term studies show that with appropriate care, implant-supported bridges can maintain healthy surrounding bone and soft tissues, ensuring functional stability.

4. **Patient Outcomes and Functionality:**

o Functional efficiency includes patient comfort, chewing ability, and overall satisfaction. Implant-supported bridges have been shown to significantly improve masticatory function compared to traditional removable prostheses.

o Long-term studies demonstrate that patients with fixed implant-supported bridges report high levels of satisfaction in terms of aesthetics, stability, and function.

5. **Durability and Long-Term Success:**

o Implant-supported bridges have shown excellent long-term durability with proper maintenance and follow-up care. However, complications such as screw loosening, wear of the prosthetic material, or implant fracture may occur over time and require intervention.

o Regular check-ups and occlusal adjustments are key to ensuring the functional longevity of these restorations.

Conclusion:

The functional efficiency of bridge prostheses fixed on dental implants depends on several factors, including biomechanical load distribution, prosthetic design, and the health of surrounding tissues. With proper planning, precise occlusal management, and routine maintenance, implant-supported bridges can provide excellent long-term functionality, durability, and patient satisfaction.

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ПОКАЗАТЕЛИ МИКРОБИОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ ПОЛОСТИ РТА У БОЛЬНЫХ, ПОЛЬЗУЮЩИХСЯ НЕСЪЁМНЫМИ ПРОТЕЗАМИ С РАННЕЙ ФУНКЦИОНАЛЬНОЙ НАГРУЗКОЙ С ОПОРОЙ НА ДЕНТАЛЬНЫЕ ИМПЛАНТАТЫ ПРИ ПЕРИИМПЛАНТИТАХ.

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Частыми осложнениями при протезировании несъёмными мостовидными протезами, опирающиеся на дентальные имплантаты относится перимплантит - патологический процесс (травматический, резорбтивный, воспалительный, язвенный) в зоне расположения имплантата. Это осложнение может возникать как в ранние, так и в поздние сроки после имплантации и протезирования. Наиболее вероятной причиной развития перимплантита может быть проникновение инфекции полости рта в зону контакта имплантата с костью.

При изучении микробиологического статуса у обследованных обнаруживалась определенная взаимосвязь изменений микрофлоры полости рта и клинической формы перимплантита. Так, микрофлора полости рта при легких