# FULL-ARCH FIXED OVERDENTURE IN LOWER JAW IMMEDIATE SOLUTION FOR EFFICIENT MASTICATION

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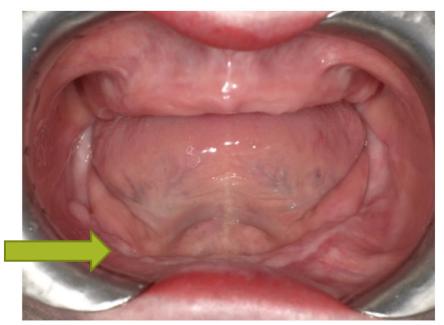
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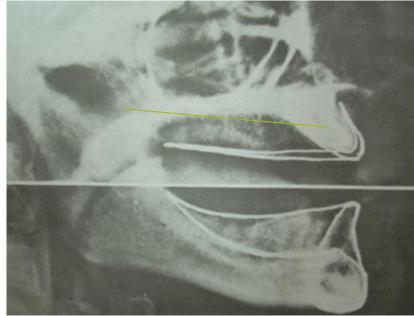
Skopje, North Macedonia



Complete anodontia and alveolar ridge resorption are responsible for lack of retention and stabilization of conventional acrylic lower denture.







### **Aim**



Hybrid prostheses on 4 implants placed immediately in the first 7 days is therapeutic solution which allows patients better chewing and increased effective masticatory force

The study aims to assess the functional and subjective treatment outcomes of full-arch fixed overdenture hybrid rehabilitation.

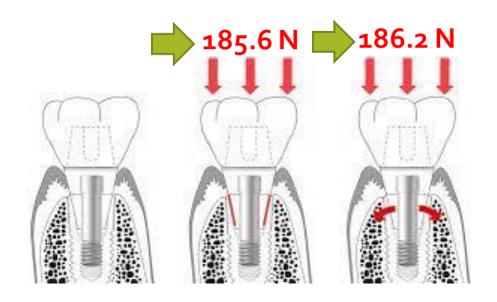
#### Material and methods

- ➤60 patients with hybrid prostheses over 4 implants were included in the study
- The measurement of the masticatory force was done in the chewing center in the projection of the distally placed implant
- Electro-gnathic-dynamometer measured the force of the muscle elevator and depressor of the mandible
- > Sensor was placed in plastic bite templates and the force value was registered three times





#### Results



The force in the case of prostheses
on implants is significantly higher
than the force measured in the
case of prostheses without
implants

The mean masticatory forces measured in the chewing center before implants and overdenture were 95.7 N.

One month later with the prosthesis the value was increased to **185.6** N and after 18 months **186.2** N.

Average values of forces in natural teeth are 487.6 N, which is an advantage of a natural tooth over an implant,

The masticatory forces in the case of prostheses on implants was significantly higher than the force measured in the case of prostheses without implants.

## Conclusion

Fixed hybrid prostheses are giving patient sense of security and stability, resulting in a better natural-looking smile.



This is indicating increased resistance to load and higher efficiency of the chewing process after the treatment.





# Thank You For Your Attention Any Question?

