Implant supported overdenture benefits

After extraction of teeth, patients can have up to 4mm bone loss. Dental implants help to maintain overall volume of bone with more than twentyfold decrease in lost structure. Patients with implant supported overdentures have less bone resorption than with conventional removable dentures.

Implant overdentures can improve patients' facial esthetics, because the denture teeth are supported by implants and can be placed in a more natural position. Without implant support, placing teeth in their original position may lead to denture mobility. Also, compared to fixed implant restorations, replacement of soft and hard tissue by overdentures will provide more lip and cheek support, especially for patients who lost teeth for a long period of time and have notable bone loss.

A conventional lower denture can move up to 10 mm during function. Implant support reduces denture mobility making it more stable. Also implant attachments can improve denture retention (ability to resist displacement in a direction opposite to insertion). Patients with overdentures have improved facial muscle thickness due to increased biting force. This fact not only enhances patient chewing ability, but again improves facial esthetics.

Placing teeth in their functional position and improving denture stability can help the dentist design more efficient occlusion and teeth can have more anatomical shape without excess denture mobility. By enhancing chewing efficiency and force, the patient's ability to chew food with implant overdenture improves. Their nutrition improves due to the ability to chew a larger variety of food choices, like harder foods as well as softer, stickier foods.

Patients with implant supported overdentures have fewer speech problems than with conventional dentures. This is again by virtue of better stability, retention, and also thanks to reduced prosthesis size, especially in palatal area.

Decrease in soft tissue abrasions and clicking sounds are also advantages of implant overdentures, again due to lower mobility. Implant maintenance is also improved with overdentures. Additionally, patients can provide better hygiene compared to fixed restorations since they are able to remove dentures.

Implant supported overdentures are less expensive and more predictable compared to full mouth rehabilitation with fixed implants because they require less implants and accordingly less bone grafting. Furthermore implant placement can be less specific than with fixed restorations. In many cases laboratory costs are less with implant overdentures compared with fixed prosthesis both during construction and repair.

References:

- 1. Contemporary Implant Dentistry, 3rd Edition by Carl E. Misch, DDS, MDS, PHD(HC)
- 2. Implant Overdentures, 1st Edition by C.J. Goodacre, DDS, MSD, W.P. Naylor, DDS, MPH, MS