Complete dentures

When looking at the cohort treated at our dental school, patients can be classified more or less into three groups. The younger patients aged around 50 with sufficient financial resources seek fixed or implant-supported restorations. You may hear them say that they "cannot imagine having a removable prosthesis like my grandparents." Those who have lost a higher number of their own teeth but cannot afford dental implants are frequently restored using removable appliances, and they clearly form the biggest cohort. Edentulous patients, however, are becoming rare in our environment and at the same time they are older, with some of them willing to pay for dental implants but having severe medical issues putting implant treatment at risk.

It is certainly a worthwhile treatment goal to maintain natural teeth for as long as possible, but in instances where patients develop medical conditions such as Parkinson disease, making them unable to maintain adequate oral hygiene, problems arise. Due to the demographic shift of more patients reaching a high age and simultaneously maintaining natural teeth, the question arises whether or not complete denture treatment still represents the state of the art or should be considered outdated.

As dental professionals we are well aware of the limitations complete dentures have in terms of stability and function. It is only a matter of time until one may encounter a patient who simply cannot accept a complete denture as part of his/her body and does not adapt to it, although from a technical point of view the denture may be flawless. To worsen the situation, complete dentures are often not adequately paid for, making them a "loss" for both the dental technician and the dental practitioner alike. To my knowledge, the advent of CAD/CAM technology in this field has not yet led to an improvement in terms of cost-effectiveness.

Despite these observations, we continue to teach complete denture techniques at universities, and in my opinion we have good reason to do so. Whenever treatment planning gets difficult or when the alveolar processes are severly resorbed, students suggest dental implant treatment, not taking into account that medical conditions as well as lack of bone volume may hinder placement of dental implants. Furthermore, only a small percentage of the population can afford dental treatment using implants, while the majority of patients still seek conventional treatment options.

I remember one of my teachers defining esthetic dentistry as nothing other than complete denture fabrication: "Simply consider your patient as being edentulous and then you know what you have to do for an esthetic result." After many years I am beginning to understand what he tried to explain with respect to tooth proportions, tooth positions, symmetry, lip line, physiognomy, etc. A second factor that cannot be overlooked in complete denture fabrication is occlusion, which to me is more critical than in fixed restorations as it greatly affects denture stability and chewing effectiveness.

Against the background of modern treatment concepts such as All-on-4, which we also use, and our awareness of reduced survival time with removable prostheses, there is a notion that dental implants are often applied in clinical situations to help support poorly fabricated complete dentures. In a considerable number of cases, state-of-the-art denture fabrication would provide the required stability to satisfy patient wishes without surgical intervention.

If we take all this into account, complete denture fabrication is not outdated – it forms the basis for comprehensive treatment and better understanding of the stomatognathic system.

Matthias Karl
Scientific Associate Editor

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