Fulcrum Identification is Key to solve Prosthetic Misfits

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How to cite this article: Patil PG. Fulcrum Identification is Key to solve Prosthetic Misfits. Int J Prosthodont Restor Dent 2018;8(2):39.

Source of support: Nil
Conflict of interest: None

An accurately fitting fixed prosthesis on the prepared tooth or a removable prosthesis on the denture bearing area is of paramount importance for the success of the restoration. A misfitting prosthesis may cause mechanical failures of the fixed or removable prosthesis and/or biologic complications of the supporting hard and soft tissues including failures of dental implants. The fixed or removable dental prosthesis undergoes a series of alternate clinical and laboratory procedures before it finally seats into patient's mouth. An error occurred in even a single procedural step may cause a prosthesis misfit. Such misfits are usually detected chairside at the time of prosthesis try-in or delivery appointment with the help of varieties of disclosing media available in the market like pressure indicating pastes, disclosing waxes, fit checking sprays, polyvinyl siloxanes, zinc oxide-based pastes, color transfer applicators, and so on. Identifying the misfits for implant superstructures needs extra cautious steps to reduce undue forces on the dental implants including alternate finger pressure, radiographic examination, one screw test, screw resistance test, disclosing media materials like un-waxed floss. In addition to such disclosing materials and techniques, the direct vision and tactile sensation of the clinician are subjective clinical steps in detecting the misfit. However, clinician's judgment to identify (or to imagine) the fulcrum, along which the prosthesis is rotating or rocking, serves a valuable information in identifying the exact location of the misfit. For example, while trying the fit of the crown or bridge or removable partial denture in patient's mouth, sometimes the proximal prematurities may not allow the prosthesis to sit completely on the supporting abutment tooth/teeth or the soft tissues and these premature contacts may be the cause of the misfit. In such and similar clinical situations, careful observation of the prosthesis movement under alternate finger pressure from different directions to find out the most obvious rocking motion can facilitate identification of the imaginary fulcrum line. The disclosing materials and methods also can serve as an adjunct information. This fulcrum is the key to resolve the problem of misfit of fixed or removable prosthesis in most of the clinical situations. Thus, improving the clinical techniques and combination of the available materials and evaluation methods can optimize the fit of prosthesis.

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