

Is Evidenced Based Treatment Planning in Prosthetic Dentistry Realistic or Only an Illusion?

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In daily practice, dentists routinely face the challenge of making fast and difficult decisions. These are mostly influenced by paradigms dictated by basic dental education and many years of clinical practice.

Scientific evidence provided by well-controlled studies is rarely available to influence and/or determine the treatment plan.

When planning a fixed reconstruction, the options are tooth-supported or implant-supported fixed dental prostheses (FDPs) or single crowns (SCs). These treatment options have various documented longevities and biological as well as technical risks that should be considered during treatment planning.

As there are no randomized controlled clinical trials (RCTs) in the dental prosthetic literature comparing tooth-supported FDPs to implant-supported FDPs, it is an open question whether or not the practice of evidence-based treatment planning is at all possible in prosthetic dentistry.

Ideally, treatment decisions should be based on well-performed systematic reviews of the available evidence and, if possible, on formal quantitative evidence synthesis and meta-analysis. If there are no studies on the highest level of evidence, the systematic review has to be based on the highest level of evidence available.

During this lecture, several common clinical situations will be discussed and attempts will be made to perform evidence based treatment planning. Special considerations will be given to the vitality of the teeth, periodontal conditions, the remaining tooth structure, esthetic priority, the presence or absence of reconstructions on adjacent teeth and the morphology of the alveolar bone in edentulous areas.