

Redefining the Consumer Satisfaction Features of Denture Adhesive Creams

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Editorial

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In recent decades, dentistry evolved enormously and there have been significant efforts in finding solutions to cope with tooth loss, a major disease worldwide. Although dental implants are used as suitable alternatives for oral rehabilitation, for most edentulous patients the main treatment option involves the use of conventional complete dentures that are aesthetically acceptable and have a much lower cost [1]. Retention, stability and function of conventional denture wearing are major issues and the use of denture adhesives, although not fully endorsed by the dental professional community, are recognized in international literature as useful in this respect. Moreover, market researches highlights that a large number of denture wearers use prosthetic adhesives creams. Denture adhesive creams are found advantageous and satisfactory by a substantial proportion of edentulous patients in providing better retention of their dentures [2]. The main ingredients in most denture adhesives are polymethyl vinyl ether-maleic anhydride (PVM-MA) copolymer and sodium carboxymethylcellulose (CMC) which are expected to swell and become sticky when hydrated. Some denture adhesive products contain zinc to provide greater strength of adhesion [3].

However recently researchers have reported the potential risks associated with prolonged use of denture adhesive creams and have also started evaluating patient satisfaction, a new parameter of evaluation not taken into consideration before. For instance excessive zinc ingestion from the overuse of zinc-containing denture adhesives can cause elevation of serum zinc levels that result in reduction of serum copper which leads to bone marrow depression along with widespread sensory and motor neuropathies [4]. Hedera et al. evaluated the hypocupremic complete denture patients and observed that all patients studied with copper deficiency had ingested large amounts of zinc from denture adherents [5]. Consequently health authorities have endorsed the use of zinc-free denture creams.

Moreover, the polymers used in denture adhesive creams can contribute to the development of oral candidiasis and denture stomatitis, leading to an imbalance of oral flora as a result of microbial contamination, and may induce resorption of alveolar bone [6].

Fortunately some action have been taken by companies supplying denture adhesives and try to respond to the market needs: today the zinc-free denture fixative creams are available while other companies launched adhesives with “natural” constituents with the aim of reducing the risks associated with the denture adhesive use.

Recently we have conducted a survey amongst denture adhesive cream users trying to identify their needs related to stability, holding time, burning sensations and taste. Then we performed a search among the products commercially available trying to identify the product that best corresponded to the patients' needs. Among the products identified, we found a new commercially available denture adhesive cream called "OlivaFix Gold" that does not contain any petrochemicals, is zinc and parabens-free and instead is formulated in organic olive oil.

The currently conducted product evaluation studies performed with OlivaFix Gold indicate very good performances recorded by clinicians as well as users: the characteristics of the product, in particular the zinc, paraben and petrochemical free composition, make it "ideal" to prevent the contra-indications registered with the adhesives used in the past. In addition, the users of OlivaFix Gold report a 24 h holding time [7]. These motivations encouraged us to design a large-scale clinical study to evaluate the characteristics of OlivaFix Gold. We intentionally designed a multi-center study in several European countries representing different socio-economic conditions of patients and we choose to enroll denture-wearing patients that are treated regularly by dental clinicians. A first analysis of the outcome of the study performed on about 100 patients, demonstrate very satisfactory results. We intend to publish the data peer-reviewed in the coming months [8].

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