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RESEARCH ARTICLE

MAIN PREDICTORS OF IMPLANTS-SUPPORTED SCREWED VERSUS CEMENT: A SYSTEMATIC REVIEW

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ABSTRACT

Rehabilitation with implants, prostheses basically have two retention arrangements, for screw or cement. There are several important factors to achieving success in implantology that can influence decisively in choosing the type of detention, such as occlusion, aesthetic crown and soft tissue, passive adaptation, cost and ease of manufacture of the prosthesis. The aim of this study was to discuss the advantages and disadvantages between the two types of prosthetic implant, or concreted and bolted. It was concluded that both cemented prosthesis as the screw can be properly used according to the clinical situation presented. There is no evidence to support, in general, a retaining mechanism over the other.

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INTRODUCTION

Since the introduction of the protocol for the rehabilitation of edentulous lower total Branemark by through the use of dental implants, the indication of implant-supported prostheses has grown progressively deforms (Silvio Mario Meloni, 2016; Bruno Ramos Chrcanovic *et al*., 2016). This prosthesis option became also used in case of unit replacements, partial or total tooth loss, both in the maxilla and mandible. Thus, the consolidation of this technique, with high rates of success, dental implants are becoming increasingly the first choice for the replacement of teeth by both the professional as well as by the patient (Silvio Mario Meloni, 2016). The advantages presented by the treatment of tooth replacement by prostheses made of implant are numerous; however, deserve special mention three of these indications: the biological preservation of teeth adjacent to prosthetic space, the preservation of the remaining bone structure of the alveolar ridge and, of course, aesthetics (Silvio Mario Meloni, 2016; Bruno Ramos Chrcanovic *et al*., 2016). Because of these factors, as well as the largest placement of information on dental implants, these have become a treatment alternative well accepted and sought (Bruno Ramos Chrcanovic *et al*., 2016). In implantology, the used fixed partial dentures can be fixed to the implants by means of screws or may be cemented to the pillars, which are retained with screws to the implant (Silvio Mario Meloni, 2016). It is a fact that the comparison of the two types of prosthetic implant - cemented and screwed - has limited scientific documentation (Silvio Mario Meloni, 2016-3). However, it is important for practitioners to understand the influence of the clamping mechanism in implantology in its many clinical aspects. The choice between a cemented or screwed prosthesis has great impact on the force transmitted to the components and the implant / bone interface, since the insertion mechanisms of cemented and screwed prostheses are quite different. Furthermore, the type of restraint to be chosen directly affects aesthetics, occlusion, passive adjustment, the cost and longevity of the prosthesis and also influences the ease of preparation (Adell, 1981; Barbosa and Fedumenti, 2009;

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Bezerra *et al*., 1999). The future dental prosthesis anchoring system can be made by cement or screws and should be designed before surgery (Barbosa and Fedumenti, 2009; Bezerra *et al*., 1999; Dario, 1996). For according to Misch, 2000, it is important to take into account the biomechanical principles and take care not to interfere with the aesthetics. This is the case, for example, previous implants, that require a more tongue insertion position, when the pre-surgical prosthetic planning, it is decided by the construction of a screwed crown, because the access hole for the screw is inserted into the cingulate crown (Misch, 2000; Mantilla, 1985). Implants placed earlier in a plane become excessively buccally obtaining a favorable aesthetic probably committed (Silvio Mario Meloni, 2016; Ganor, 1996). Both types of prostheses - Screwed and cemented - have certain advantages and disadvantages. Thus, clinicians should seek knowledge of the limitations and disadvantages of each type of prosthesis, then select the one which is most appropriate for a given clinical situation (Bruno Ramos Chrcanovic *et al*., 2016). The aim of this study was to discuss the advantages and disadvantages of both types of prosthetic implants, cemented and screwed.

METHODS

For the identification of studies in this review study, carried outa detailed search strategy for Medline, Pubmed, Embase, Ovid and Cochrane Library in the years 1981 - 2016, as well as books and related to the topic magazines. They were used the descriptors: Prostheses; Implant-Supported Prosthesis; Screwed Prosthesis; Cemented Prosthesis; Implantology; Extraction and Cariology. Analyzed studies systematic review, meta-analysis, randomized controlled cases, nonrandomized clinical cases and opinion articles que addressed the term Implant-Supported Prosthesis. The date were analyzed, correlated to the discussion of the results highlighted in the literature and have also highlighted the main advantages and disadvantages of each, as showed in the Tables 1 and 2.

Continuous Predictors

The continuous predictors prosthesis were screwed and cemented prosthesis.

Response Predictor

The response was predictor technical quality.

Development – LiteratureReview

In general, the techniques used in prosthetic implants to achieve the structural integrity of the crown complex / abutment and implant / abutment screw include the use of cement or (Silvio Mario Meloni, 2016; Misch, 20007). The retention by screw implant-supported prosthesis was fundamentally developed in response to the need for reversibility of the prosthesis, permitted by this form of connection, and an essential property in the face of high rates of complications at the beginning of the development of implantology, where often the removal the prosthesis was required for repair or replacement. (Mantilla, 1985) However, with the evolution of techniques and high survival rates of implants demonstrated, the question of reversibility of prostheses retained by screws had its reduced importance; and so the use of cemented prostheses has considerably increased (Ganor, 1996). This development began after the UCLA pillar modification, transformed into customized and fused pillar and then connected to the implant receives a cemented coping, similar to prosthetics on natural abutment teeth. Many implant systems have pillars retained by screws and on these pillars, the prosthesis may be cemented, using cooking techniques that mimic the procedures of conventional fixed bridges on natural teeth (Bruno Ramos Chrcanovic *et al*., 2016). Thus, although the prosthesis screwed remain as the mechanism of choice for most clinical, cemented prosthesis has become, in many cases, prosthetic option selected for treatment of patients with implants (Bezerra, 1999).

Table 1. Advantages and disadvantages of implant-supported prostheses screwed.

Advantages	Disadvantages
It allows changes in the prosthesis and processing of the case.	Higher cost and greater complexity in their manufacture, compared to cemented.
They can be employed in low-profile pillars.	The aesthetic is compromised by the presence of screws on occlusal surfaces.
They may be removed periodically to assess hygiene.	Periodic maintenance is required (adjustment or replacement of the screws).
	Difficulty in obtaining axial and more equal loads on the implants, which results in higher voltages.
	Difficulty to obtain a passive fit of the prosthesis.
	The "store" bolts have weak areas and can facilitate fracture of the porcelain or acrylic.
	Compromise occlusion and excursive movements due to the presence of the screws in the occlusal surfaces.
	Patients report feeling uncomfortable described as "oppression" due to threading.

Table 2. Advantages and disadvantages of implant-supported prostheses cemented

Advantages	Disadvantages
Making simpler and less costly;	Does not allow the removal of the prosthesis;
Excellent aesthetic results.	Inability to be employed in low-profile pillars.
One can easily fix the prosthetic axis;	
Enables the peri-implant hygiene;	
Settlement of more passive prosthesis.	
Greater ease of use of axial loads on the implants.	
Less acrylic or porcelain fractures.	

Both screwed prosthesis as cemented must meet certain basic criteria: they must restore function, esthetics and phonetics, be made in order to allow proper hygiene should be reversible to allow maintenance and repairs and finally structurally designed to protect the implants support (Gomes, 1999). Protecting the implant is a key factor in any work, either in a single tooth as a full-arch prosthesis. The infrastructure must respect the basic biomechanical principles: adapt accurately. Sit passively and effective load distribution between the implants (Gomes, 1999).

Screwed prosthesis

Dentures retained by screws have a successful and victorious documented history of use in completely edentulous patients. The first prosthetic used dental implants were screw-retained, which emerged from studies presented by Branemark (1977) (Branemark, 1977), which established the placement 4 to 6 implants in intermentoniana region arcade lower edentulous, with order to support a fixed prosthesis screw-retained, with distal extension. Screws may be used to fix the abutment to the implant and the prosthesis to the abutment. The screws for different purposes have different mechanical properties because of its size, design and metal composition (Silvio Mario Meloni, 2016). The screw under tension controls two components together, the prosthesis to the abutment and the abutment to the implant. Confinement is achieved by tightening the screw, the friction resistance developed between the internal threads of the implant and those of the screw. The screws are commonly used titanium, aims to generate adequate clamping force to keep the unity of componentes.e torque must meet the manufacturer's specifications (Madallena *et al*., 1998). The screwed prosthetic implant using a screw connecting the abutment to the implant (abutment screw), and a second screw connecting the abutment to the implant (prosthetic screw) (Silvio Mario Meloni, 2016). All components are easily disassembled, and thus recoverable. A more common alternative current is direct bolting of the prosthesis to the head of the implant, with a single screw, using pillars type "UCLA" partially or totally castable (Bruno Ramos Chrcanovic *et al*., 2016-4).

This technique eliminates the need for a structure that makes the connection between the crown and the implant, making the simplest and economic rehabilitation, being reserved for metal-ceramic crowns (Bruno Ramos Chrcanovic *et al*., 2016). A disadvantage of these restorations is that a part of the structure, the crown, there being machined, with the possibility of small marginal collapsing discrepancies with a proper communication between the implantodontist and the dental technician and to the use of materials excellent quality (Branemark, 1977). Oliveira *et al*, 2007 (Oliveira, 2007) cited some advantages of this type of prosthesis: reversibility, reduced interocclusal spaces, availability and range of components, multiple implants, superstructures with cantilevered and better adaptation of the components to be prefabricated. The disadvantages: the difficulty of passive fit, aesthetics, less versatility, limiting the placement of the implants, the lower the fracture resistance of china, the higher manufacturing cost, the presence of microgap greater possibility of loosening of the screws and also concluded that bolted of voltage levels is less than cemented. Jemt 1991 conducted a study, in vivo, which followed a year 391 fixed prostheses (Branemark protocol) over 2199 implants in both arches, in order to observe the success rate of conventional implant-supported prostheses and which the most frequent problems. The reversibility was an important feature for these prostheses, because in this period, 25% of the prostheses required removal for any maintenance. Thus, reversibility is an advantage to protect the replacement or rescue a prosthesis by the need to: periodic replacement of prosthetic components, loosening or screw fracture, abutment fracture, change the prosthesis after loss of some implant and in cases of surgical intervention and for better assessment of oral hygiene and treatment periimplantitis. In order that the simplicity of recovery is particularly important if complications arise (Bezerra, 1999; Ganor, 1996; Jemt*et al*., 1991). The screwed prosthesis should typically be suitable for situations with interocclusal space limit or implantation of small diameter (Dario, 1996). In areas where interocclusal space is limited, the screwed prosthesis is more effective than the cemented prosthesis, which requires greater height and the walls of the pillars surface area for adequate retention. And in the case of screwed prosthesis, retention is provided by the screw clamping force (Dario, 1996).

Some studies report that the peri-implant soft tissues respond more favorably screwed prostheses when compared with cemented prostheses (Silvio Mario Meloni, 2016; Bruno Ramos Chrcanovic *et al*., 2016). The retention of the prosthesis with screws eliminate or reduce irritation of soft tissues, especially in subgingival sites. Moreover, there are no rough surfaces of the pillars to confer highly polished surfaces, which facilitates wound healing. Thus, another indication for correct screwed prosthesis happened when the end margin of the prosthesis is greater than 3.0 mm subgingivally as removing excess cement in such cases can be difficult. This situation is particularly common in the anterior region in which implants are placed immediately after extraction (Silvio Mario Meloni, 2016; Bruno Ramos Chrcanovic *et al*., 2016). If implants are placed 3 to 4 mm apically the cementum-enamel junction or the margin of vestibular tooth gum adjacent to a correct emergence profile, the proximal edge of the prosthesis can be very deep subgingival because implant and abutment has a single level circular edge, whereas the interproximal soft tissue is higher (Branemark, 1977; Oliveira, 2007). Davarpanah *et al*., 2003 (Davarpanah, 2003) cited as a disadvantage anatomical emergence profile sometimes difficult to achieve. Gomes *et al*., 2006 (Gomes, 2006) stressed that screwed prostheses very committed to occlusion because the "store" Bolt uses approximately 50% of the occlusal surfaces of posterior teeth that interferes with the axial contacts that should be on the implants. Reported a large number of complications and prosthetic problems presented primarily with the screw fracture, they claim that this fact is due to a non-passive fit of the metal structure or due to parafunction addition to the mechanical loading problems and / or biomechanics that may appear in implant-supported prostheses, erroneous design of the prosthesis and / or improper seating of the piece (Gomes, 2006). Also reported that the possible consequences of a mechanical overload are loosening the screw that holds the prosthesis or screw holding the intermediate pillar; the fracture of one of the screws and the fracture of the prosthesis (Gomes, 2006). Freitas *et al*., 2007 (Freitas, 2007) added besides the aforementioned characteristics, aesthetics by the access orifice of the retaining screw. The screwed prosthesis generally requires precise positioning of the implant to allow an optimal location of the screw access hole.

Since the deviation angle and positioning can lead to a restoration with aesthetic affected (Freitas, 2007). Chee *et al*., 1999 (Chee *et al*., 1999) stated that screwed prostheses have greater aesthetic commitment by the existence of occlusal access to the fixing screw crown. The fact that the screw channel is metal causes, to emerge on the occlusal surface, it forms a metallic ring. The screw access hole takes on average 50 to 60% of the occlusal table, making it very noticeable by the color difference between the porcelain and the composite resin that covers the screw. In some cases the screw comes to be exposed by insufficient height of crown (Freitas, 2007; Chee *et al*., 1999). In addition, there will compromise the aesthetics, the screw access opening involve the incisal edge or in clinical situations in which the axial alignment of the implant may require a buccal overextension. There is also potential for contamination by infiltration of bacteria at the boundary of the resin used to close the access opening. And yet, these access holes to screw the screwed prosthesis can also weaken the structure of the crown porcelain, around the hole and the cusp tips, increasing the risk of crack and porcelain fracture (Barbosa, 2009; Ganor, 1996; Freitas, 2007).

Cemented prostheses

Cemented prostheses have gained popularity in recent years, and this is due, among other things, to the fact that these prostheses allow the use of many of the clinical and technical procedures established to conventional fixed prosthesis. There are numerous types of abutments for cement-retained prosthesis, which work when these pillars are screwed into the head of the implant, and then the superstructures of the prostheses are cemented on them (Barbosa, 2009; Dario, 1996; Oliveira, 2007). The prostheses have also cemented a connection abutment screw to the implant. However, the prosthesis is cemented to the abutment, similarly to the fixed prosthodontic on teeth. The main advantage of this technique is that it can use all-ceramic crowns on prepared pillars in the laboratory (metal or zirconia), and allow easier prosthodontic correction misplaced implants (Stanley, 2009). So that some factors influencing the retention of cemented prostheses, either natural teeth or prosthetic implant (Silvio Mario Meloni, 2016; Bruno Ramos Chrcanovic *et al*., 2016). Among them stand out convergence and height of the axial walls, area and surface texture, and the type of cement used. In order that the taper recommended for preparations of natural teeth is between 15 to 25 degrees.

Most abutments for implants have 6 degrees of convergence coming closer still the recommended ideally (Silvio Mario Meloni, 2016). Therefore, the retention of cemented prostheses implants is about 3 times greater than the retention of natural teeth. The way to fill the screw access channel under the cemented coping, and also cited as a retention factor. In addition, there are factors that can affect the crown as the internal texture of the coping, and "splintagem" of multiple units (Silvio Mario Meloni, 2016; Barbosa, 2009). For some authors, there is preference for cemented prosthesis due to the following factors: development of abutments and wax Ucla One; superior aesthetics in situations where an angle of unfavorable implant would lead to an undesirable position of the access channel; difficulty of ensuring absolute passivity bolted structures above, which can lead to the formation of stresses between bone tissue and implant; simplicity of treatment and, moreover, the use of temporary cements give the required recoverability Ace implant supported prostheses (Adell, 1981; Dario, 1996; Davarpanah, 2003). Madallena and Madallena, 1998 (Madallena, 1998) cited the technique of cementless prosthesis as one of the simplest methods. . Gomes *et al*, 1999 (Gomes, 1999), described the advantages of cemented prosthesis: the cost; ease of manufacture; and allowing the positioning of the prosthesis on implants which are out of alignment, by overcasting or the use of angled abutments. However, mentioning the disadvantage that when there are gaps in the abutment or cementing fractures, a serious problem is the removal of the sleeve of the implant without damaging the same. They point out that this prosthesis can be used only when there is a crown ratio / favorable implant. Also, they mentioned that there is a tendency to use cemented prosthesis implant due to its qualities related to occlusion, aesthetics and misalignment of implants (Gomes, 1999; Madallena, 1998).

A relevant aspect that has led to the increased use of cementless prostheses and their ability to enhance occlusion and enhance the aesthetics in areas where they could be located in the access holes to the screws and also for providing passive adaptation and improve the loading characteristics, (Oliveira, 2007). However, the passive adaptation appears to be the first factor related to the choice of the prosthesis cement-retained. The existing space for cement between the crown and the abutment can help offset and reduce any discrepancies or crown fitting fault with the pillar. The cement can act as an absorber any deformation caused by a bad fit, and thus may be able to preserve the prosthetic structure under high stress (Ganor, 1996). The layer of cement that could offset some maladjustment in the adaptation of the cementation coping was seen as a solution to the problem of passive adaptation of prostheses (Ganor, 1996; Madallena, 1998). Misch 2000 indicates a more passive model as an advantage of cemented implants, passive final restorations are highly unlikely when two or more implants urn support by a screw retained prosthesis and method of attachment. Passive foundries represent a considerable advantage in the cemented prosthesis. Guichet *et al*., 2000 demonstrated by means of an assessment model photoelastic passive fitting screwed and cemented prostheses and partial noticed a more equitable distribution of stress in a cement retained than bolted. The absence of a screw access hole still allows the prosthesis design providing greater resistance porcelain, resulting in lower incidence of fracture. In this situation, the occlusal surface is devoid of the hole, and thus occlusion can be further developed to meet the need of axial load in addition to having a greater number of occlusal contacts, allowing a higher occlusion (Guichet, 2000). Crisp *et al*., 2004 (Torrado, 2004) demonstrated that resistance to fracture in porcelain crowns screwed onto the implants, is significantly reduced when compared to the cemented due to the presence of the access port to the locking screw of these prostheses. However, the biggest disadvantage of the prosthesis held by cement, and the difficulty of reversibility, and an even greater challenge in cases where there is the abutment screw loosening making removal difficult coping, if not impossible, without cutting it, in this case requiring the fabrication of a new denture (Barbosa, 2009; Chee, 1999). These cements when used in metal interfaces with excellent adaptation, suitable surface area and ideal taper provide a good retention will Prosthetic structure also offers the possibility to remove it to

control (Mantilla, 1985; Jemt, 1991; Torrado, 2004). Thus, another important factor is the type of cement used. The choice of the type and quantity used is essential to achieve the highest possible retention. The cements used in fixed prosthesis may be provisional or definitive. (Silvio Mario Meloni, 2016) The final cements are used to increase retention and provide a good marginal sealing (Bruno Ramos Chrcanovic *et al*., 2016). The temporary cements are primarily used in temporary implants to facilitate its removal, since there is no risk of the coping loosen up the column. The temporary cement can be used to implant prosthesis on, and they are weak, allow the reversibility of the prosthesis. definitive cements in this context has its recommendation questioned denture retention on implants because they are very strong and do not allow reversibility (Adell, 1981; Gomes, 2006; Guichet, 2000). Another factor to be considered is that cemented crowns can enable the presence of waste cementation which may lead to peri-implant inflammation. The more subgingival are more difficult cementation line is the complete removal of excess cement, with the possibility of cement waste is forced into the groove when the prosthesis is seated (Silvio Mario Meloni, 2016; Bruno Ramos Chrcanovic *et al*., 2016).

This can lead to bone loss around the implant. cement residue can cause an inflammation of the peri-implant tissue, as well as pain and increased probing depth, bleeding and exudate. Therefore, it is very important to eliminate any excess cement to avoid an iatrogenic inflammation (Bezerra, 1999). Finally, the cemented prosthesis can also provide a microgap between the implant and the prosthesis, creating a subgingival microorganisms under potential to cause problems with soft tissue. Additionally, this "gap" between the crown and the implant or the abutment has been associated with a more severe bone loss during the first year of the dental implant function (Dario, 1996).

DISCUSSION

The prosthesis constitutes a key part in treatment with dental implants, because, ultimately, it is the result of the treatment itself. It is what the patient demand (Silvio Mario Meloni, 2016). In this sense, the prosthetic implant use many concepts arising from conventional fixed prosthesis and preserves the basics, so that the fundamental characteristics of the prostheses are maintained, restoring function, esthetics and phonetics, without causing damage to components and implants (Neves, 2003). Choosing the best type of retention for implant-supported prosthesis depends on the clinical situation, the positioning of the implants in the arc, the type of fixation used, professional experience and the scientific basis (Silvio Mario Meloni, 2016; Bruno Ramos Chrcanovic *et al*., 2016). In some clinical situations, such as in cases of implants proclined and located in areas with high aesthetic requirements, cemented restorations gets better results. In other cases, such as limited interocclusal distance and in cases of total arch rehabilitation require screwed restorations (Johnson, 1999). However, there are cases that both can be restored with cemented or screwed prosthesis and it is in these situations where the choice should be fairly considered. The implant-supported restorations are subject to a number of complications, which may require removal to restore the original situation. May occur porcelain fracture, fracture or loosening of the screw or abutment, inflammation of the peri-implant mucosa, situations requiring surgical access for removal professional hygiene and prophylaxis, among others. These conditions associated with a high success rate of longitudinal implants require the implant-supported prosthesis or impairment of the quality reversibility (Schnetzler, 2009; Neves, 2003). In this context, Branemark, 1977 (Branemark, 1977), presented studies demonstrating the advantage of screwed prostheses, ease of removal in case of replacement of a prosthetic component damaged. According to Jemt 1991 (Jemt, 1991) the removability is a key feature for implant-supported prostheses. Williamson, 2000 (Williamson, 2000) conditioned the success for peri-implant health, the use of screwed prosthesis due to its accuracy adaptation, which will lead the longevity of the implant screw and the prosthesis itself. The same reporting Gomes *et al*., 2006 (Gomes, 2006) SchnetzlerNeto *et al*., 1993 (Schnetzler, 2009) Oliveira *et al*., 2007 (Oliveira, 2007) and Stanley and garlic, 2009. (Stanley, 2009) noting that additionally be associated with periodic removal of possibilities when necessary prosthesis assessment of oral hygiene, surgical intervention and modification of the prosthesis, after the loss of an implant.

Dario *et al*., 1996 Chee *et al*. 1999 suggest the use of temporary cement for fixing prostheses cemented implant-supported, thereby facilitating its removal and reducing disadvantage of this type of prosthesis in relation to the bolt. Thus, for most business, bolted prostheses remain as the select detent mechanism, just for allowing the prosthesis to be reversible, without compromising the integrity of the crown, abutment and the implant itself, eliminating the need for the preparation of a new prosthesis, or for its ease of maintenance. However, some authors, and possible cemented prosthesis achieve reversibility by means of suitable cement usage and the use of columns with walls having height and suitable conicity, to improve the retention and difficult the release and fall of the crown, may therefore it is recommended to use temporary cement instead of the final cement. Another way to achieve this goal and the technique of progressive cementation, in which the control and also performed with the choice of the cementing agent (Dario, 1996; Madallena, 1998). Rajan and Gunaseelan 2004 (Rajan, 2004) also describe a technique in which the prosthesis can be reversible, in which they consider the simple technique, practical and effective, and consists in the making of a screw access hole included in the making of the definitive crown. And this must be cemented on the abutment outside the mouth and subsequently placed in intraoral position; then the hole and filled with gutta-percha is coated with light-curing resin. From an aesthetic point of view, screwed restorations always have the commitment of the occlusal or lingual surface with the screw access channel hole that must be restored with composite resin after the final tightening of the screws that secure the superstructure. And this restoration does not always meet the aesthetic requirements. (Johnson, 1999) Because of this, authors like Freitas *et al*, 2007 cite as disadvantages of screwed prostheses, aesthetics, as this is compromised by the access hole of the retaining screw; being supported by (Davarpanah *et al*., 2003) observed that the difficulty of performing the anatomical emergence profile. In situations where the angulation of the implant to take an unfavorable emergence of fixing screw in extremely aesthetic areas such as.buccal surfaces of anterior teeth, the use of screwed prosthesis is not contraindicated, but common sense leads to indication of cementless solution for these situations or be used an angled abutment (Davarpanah *et al*., 2003).

Moreover, the presence of the occlusal side access port can compromise the integrity and porcelain lead to fractures (Gomes *et al*., 1999). Gomes *et al*., 2006, reported that the screwed prosthesis very undertake occlusion because the "store" screw utilizes approximately 50% of the occlusal surfaces of posterior teeth that interferes with axial contacts that should be on implants. This aspect needs to be analyzed carefully. In a unitary restoration occlusal contacts they can and should also be distributed to the adjacent natural teeth. In partial rehabilitations, the contact is distributed between the pillars, Pontic and natural teeth, not requiring more than one or two contacts per tooth to get urn balanced occlusion. In total rehabilitations, usually the holes in the access channel are located lingually the occlusal surface of the teeth, does not result in the vast majority of cases, any prejudice a balanced distribution of occlusal contacts, considering although there are usually four to six fixings for a supra structure with ten or more teeth (Taylor, 2000; Singer, 1996). Because of this, there are many complications and prosthetic problems presented primarily for the screw fracture.

They also claim that this fact is due to a non-passive fit of the metal structure, in addition to problems of mechanical overload and / or biomechanics (Rajan, 2004). Since the possible consequences of a mechanical overload are loosening the screw that holds the prosthesis or screw holding the intermediate pillar; the fracture of one of the screws and the fracture of the prosthesis (Taylor, 2000; Singer, 1996; Piattelli *et al*., 2001). Moreover, the absence of the screw access hole in the prosthetic crown structure and a great advantage, since it allows to obtain a very superior esthetics in areas where holes would be located, as in the vestibular region of the anterior superior teeth; eliminating the screw profile or orifice of the filling composite. Moreover, the cemented prosthesis allows the complete production of the crown with porcelain offering occlusal contacts in greater number and well distributed, giving an ability to optimize inter-occlusal-relacionamento (Silvio Mario Meloni, 2016; Madallena, 1998; Freitas, 2007; Williamson, 2000). Regarding the aspect of biocompatibility and microbiological evaluations of the internal face of bolted structures and cemented found that there is little clinical effect on the prosthesis fixation mode (either bolted or cemented) (Taylor, 2000). Piatelli *et al*., 2001 evaluated the penetration of fluids and microbial flora inside abutment connections for cemented and screwed implant. Based on the results obtained in this study concluded that the cemented when there is dissolution of cement, offer better results with respect to the permeability of bacterial flora and oral fluids compared the abutment connections for screwed implant (Keller *et al*., 1998; Sahin *et al*., 2001; Moura, 2008). For Keller *et al*. 1998 (Keller *et al*., 1998), in relation to the microflora which may inhabit the microfenda between the abutment and the prosthesis, either screwed or cemented, the setting mode has little influence on microbiological and clinical parameters. It is observed that only in relation to the peri-implant soft tissues, they respond more favorably screwed prostheses when compared with the cemented prosthesis, probably due to the possibility of better finish of the prosthetic element and the absence of a cementing line at the peri-implant sulcus. Thus, cemented prostheses tend to have higher bleeding in the groove and greater plaque index, but no recession in the soft tissue was found to be more prevalent in some kind of prosthesis. It is up to the practitioner to evaluate the pattern of patient's oral hygiene, instruct it appropriately in relation to cleaning of teeth and implant-supported elements, and thus individually setting the type of prosthetic connection can interfere with the health of the peri-implant tissues (Stanley and Alho, 2009; Taylor, 2000; Singer and Serfaty, 1996). SchnetzlerNeto *et al*., 2009 (Schnetzler, 2009) concluded that the advantage of ease of removal of the screwed prosthesis is clinically insignificant since today, if it is compared with the advantages offered by cemented prosthesis. They concluded that the screwed implant supported dentures, are preferable only when imperative, the crown ratio/ unfavorable implant and insufficient inter-occlusal space. Darius, 1996. Stated that a cement-retained prosthetic restoration may also be reversible, since the selection of cements consider their retentive properties in accordance with the retention required for the restoration. They concluded that the cement-retained prostheses also offer more facilities to get a great aesthetic. Moura *et al*., 2008 (Keller, 1998) concluded that both techniques have their pros and cons, leaving the final decision on what type of fixing is used in implant-supported prostheses directly related to the knowledge that professionals have about each of them. Thus, biomechanical, and even aesthetic experience of professional factors should form the cornerstone of evaluation when planning the type of prosthetic connection to use. Some authors report that personal attitudes form the basis for deciding which hold mode is preferable with respect to aesthetics, retention and reversibility, cost and practicability. Highlighted the importance of this decision is made based on a careful treatment plan encompassing experience and ability of the professional as well as the physical and psychological needs of the patient (Dario, 1996; Sahin *et al*., 2001; Moura, 2008).

Conclusion

It was concluded that each of the adopted systems have their advantages and disadvantages. Planning, as in all treatment must be very important in the choice. The reversibility factor and fairly considered in the screwed prosthesis, but there are several features that can become cemented prosthesis also a reversible procedure. The professional should evaluate well the case, the region, the tooth implant characteristics to correctly indicate the type of prosthesis, considering its limitations.

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