의 설계등 여러 요소에 달려 있으며, 특히 골 유착성 고정체는 고정체와 지지골 사이에 골유착이 잘 되었다 하더라도 생체기능성의 측면에서 구강이라는 특수한 환경내에서의 저작시 발생하는 교합력을 적절히 지지할 수 있도록 생체역학적으로 설계되지 않으면 성공적 예후를 보장할 수 없다.

최근 우리나라에서도 치근형 골내 임플란트에 대해서 많은 연구가 이루어지고 있지만 임플란트의 성공률을 고려한 장기적인 임상보고는 그리 많지 않은 편이다. 본 연구에서는 9년간 본 병원에서 시행한 임플란트 시술 결과를 바탕으로 통계적 분석을 통해 골유착성 임플란트 시스템의 성공률을 분석한 결과, 치과 임플란트 시술이 신뢰할 만한 치료이며 치료과정에 있어 다양한 요소들이 복합적으로 조화를 이루어야만 임플란트 시술이 성공을 얻을 수 있었다. 그리고, 임플란트의 성공률에 영향을 주는 요소와 치료시 고려해야 할 사항들에 대해 다소의 지견을 얻었기에 이에 보고하고자 한다.

OIII-11 Attachment를 이용한 Implant와 자연치의 연결

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자연치와 implant는 응력 분산의 형태가 매우 다르기 때문에 일반적으로 자연치와 implant를 혼합하여 고정성 금관 수복을 하기보다는 자연치 끼리 또는 implant 끼리 고정하는 것이 대부분이다.

그러나, 여러 가지 다양한 구강내 상황에 의해 이러한 이상적인 치료가 되기 어려운 경우 attachment를 응용하여 자연치와 implant를 연결하는 치료법을 선택하게 된다.

non-rigid attachment는 임상적으로 자연치의 intrusion을 유발한 증례가 많아 점차 사용이 줄어들고 있는 반면, rigid attachment를 이용한 경우 비교적 안정적인 것으로 보고되고 있다.

본 증례 발표에서는 원심으로 치우쳐 매식되어진 #47부위의 single implant의 응력에대한 과도한 부담과 상부구조의 screw loosening에 의해 파생되어지는 문제유발의 가능성을 줄여 주기 위해 자연치와 implant를 attachment를 이용해 연결하는 증례와, 구치부 single implant로 수복하였으나, fixture head의 hex마모로 계속적인 rotation이 유발되는 상황에서 implant를 후방부 자연치와 연결하여 안정성을 향상시킨 증례를 발표하고자 한다.

Oral Session IV(AAP) Ballroom I

OIV-1 Effect of High Speed Vibration and Cementing Media on the Retention of Post and Cores

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Purpose : The purpose of this study was to evaluate the effect of high-speed vibration on the retentive

properties of post and cores using different cements and time periods after cementation: Glass ionomer cement(Fuji-Ionomer, GC Dental), resin cement on the etched post space surface(Microjoin, SCI-Pharm), resin cement on the etched post space surface(Microjoin, SCI-Pharm), resin cement on the unetched post space surface, and zinc phosphate cement(Fleck's, Mizzy);115 minutes, and two weeks.

Materials and Methods : One hundred and thirty human mandibular first premolars were embedded in expoxy resin and prepared for the nine millimeter long and parallel cast post and cores. Cast post and cores were fabricated using Ag-Pd-Cu alloy(Ivoclar North Amercia) and cemented using four different cementation methods. Finish-line refinement was done 15 minutes and 2 weeks after cementation. Tensile strength test was carried 24 hours and 15 days after finish-line refinement using the Instron universal tester.

Results : When zinc phosphate cement was used as a luting agent, there was no significant difference between groups refined at 15 minutes or 2 weeks. When glass ionomer cement was used as a luting agent, the groups which have time periods of 15 minutes between cementation and final refinement and 15 days between refinement and retention test showed the highest retentive properties. When resin cement was used as a luting agent on the etched post spaces, the groups which have time periods of 15 minutes and 24 hours showed significantly lower retentive properties than the other groups. When resin cement was used as a luting agent on the unetched post spaces, the groups which have time periods of 2 weeks and 24 hours showed the highest retentive properties.

Conclusions : When glass ionomer cement is used as a luting agent for post and cores, it is better to do the final refinement after 15 minutes. When resin cement is used as luting agent on the unetched post space for post and cores, it is better to delay the final refinement for 2 weeks. When resin cement is used as a luting agent on the etched post space for post and cores or zinc phosphate cement is used, there is no difference of retentive properties whether final refinement is done 15 minutes after the cementation of post and cores or it is done 2 weeks after the cementation

OV-2

25-year Study on Number and Distribution of Fixed and Removable Restorations at Tsurumi University Clinic

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We have been surveying number and distribution of the prosthetic restorations fabricated at the Dental Clinic of Tsurumi Univ. every two year for the 25-year period, from 1972 to 1996. Number and distribution of each restoration were examined with the fee slips which were issued from the material section and calculated through personal computer. The total number of restorations had increased rapidly until 1986 and then began to decrease gradually.

However, distribution of each restoration in this period has changed very little, that is, approximately 55% of single crowns, 25% of removable partial dentures, and 10% of fixed partial dentures and complete dentures respectively. Ten years ago, ceramometal crowns were the chief restorations for the frontal teeth(38%), but now occupy only 20%. On the other hand, resin facing crowns indicate the highest rate with 71%. These changes could be explained by the introduction of resin facing crowns into social insurance in Japan.