





Congress of the BaSS
11-14 May 2023, Skopje
Republic of North Macedonia

CURRENT TRENDS AND ADVANCES IN

DENTISTRY





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## Congress of the BaSS 11-14 May 2023 Skopje, Republic of North Macedonia

"CURRENT TRENDS AND ADVANCES IN DENTISTRY"

ABSTRACTS BOOK
26<sup>th</sup> Congress of Balkan Stomatological Society (BaSS)
11-14 May 2023, Skopje
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# PRESIDENTS'S MESSAGES



Dear Distinguished Colleagues,

It gives me great pleasure to announce that the forthcoming 26th BaSS annual congress will be held in Skopje, North Macedonia, between 11th and 14th May 2023, continuing the tradition that began in Thessaloniki in 1996.

There is no doubt that this Congress of the Balkan Stomatological Society will contributes to promoting further professional cooperation and provide opportunities for mutual exchange of experience regarding modern dentistry. Its objectives include improving dental health services and dental medicine researches, as well as strengthening friendship among dental professionals who are committed to enhance their knowledge and skills.

After ten years, the City of Skopje will have the opportunity to host dentists not only from the Balkan region but also from countries around the world, and once again, they will have a chance to experience the impressive attractions and historic splendors in the country.

It is certain that this event with its conferences, round tables, scientific works, dental exhibitions and social programs will provide you with an experience that will be treasured for a lifetime.

I do really hope that you will join us on 11 May in Skopje, to share and gain insights about the up-to-date aspects of dental medicine currently being practiced worldwide.

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Dear friends, esteemed colleagues,

It is my utmost pleasure to invite you to the 26th Congress of the Balkan Stomatological Society (BaSS), which will take place in Skopje, Republic of North Macedonia, from 11th to 13th of May, 2023.

The Congress will be a wonderful opportunity to exchange knowledge, know-how and experience between colleagues not only from the Balkan countries, but, from Europe and across the globe, as well.

The congress program will be comprised of a plethora of lectures from distinguished speakers from around the world, oral and poster presentations of the newest research findings, round tables and courses that give the participants opportunity to learn new clinical methods and modalities. Additionally, an exhibition of the most renowned companies in dentistry will give you an opportunity to be in touch with the newest advances in dental technology.

Last, but not least, I would sincerely like to invite you to our beautiful country, the Republic of North Macedonia, and its capital, Skopje, where you are going to be able to experience the wonderful Macedonian hospitality, cuisine and sights, while meeting old colleagues and friends and establishing new ones.

We are more than happy and looking forward to being your hosts in Skopje,



Dear Colleagues members and followers of the Balkan Stomatological Society (BaSS)

It is a great privilege to welcome you to the 26th BaSS Congress to be held in Skopje, North Macedonia from 11 to 14 of May 2023 from the position of Honorary President of the Congress.

For this honorable appointment I would like to express my sincere thanks to my dear friend Professor Ana Minovska, President of the Balkan Stomatological Society (BaSS) and Professor Elizabeta Gjorgievska, President of the 26th Bass Congress.

This BaSS Congress following the tradition of all previous BaSS Congresses will bring again together Dentists and Dental Students from all the Balkan Countries, in this post COVID-19 pandemic new beginning of face-to-face Meetings following the start we did in Sarajevo, Bosnia and Herzegovina last May.

Once again, we will be able to share scientific knowledge amongst colleagues and friends and enjoy the opportunities for social entertaining in the hospitable environment that our colleagues in North Macedonia are preparing.

With these few words I would like to invite you to make plans to join us in this 26th Congress of BaSS in Skopje next May. I look forward in seeing you there!

Professor Argirios Pissiotis DMD, MS, PhD, FICD Honorary President 26<sup>th</sup> BaSS Congress



- <sup>2</sup> PHO University Dental Clinic "St. Pantelejmon", Department of Orthodontics, Skopje, North Macedonia
- <sup>3</sup> Department of Prosthodontics, Faculty of Stomatology, Ss. Cyril and Methodius University, Skopje, North Macedonia
- <sup>4</sup>PHI Institution Health, North Macedonia

**INTRODUCTION:** Early childhood caries (circular caries) can occur at an early age, with the eruption of deciduous teeth of the age of 1 to 1.5 years old. This is a multifactorial dental disease that has become a worldwide problem with high prevalence in recent decades.

**AIM:** The purpose of the study was clinical evaluation of the remineralizing effect of the topical treatment, in patients with starting stages of circular caries.

**CASE REPORT:** This study was conducted at the Clinic for Pediatric and Preventive Dentistry, Skopje, and included 117 patients of both sexes, with the starting stages of circular caries. They were aged of 1.5 to 3.5 years old, with a fully formed primary tooth. It was selected 61 patients with initial lesion – white spot and 56 patients with superficial form. From both groups 30 patients were treated with topical fluoride preparation, for a period of six months, applied once a week. The remaining patients had regular check-ups and instructions, but they did not undergo fluoride treatment. After the fluoride treatment, we followed the remineralizing effect, i.e. which initial lesions were reversed or where the intracrystal spaces were filled and the crystals were repaired after six months of topical application. In some patients who were able to satisfy other preventative factors, we were able to obtain a clinical picture of complete remineralization on initial lesion (restitution ad integrum) in vivo, approximately similar to a healthy tooth. How successful the remineralization will be depends on the predominant, protective, or pathogenic factors.

Keywords: circular caries, early childhood caries, remineralization, initial lesion, white spot

#### **PP-30**

#### **EVALUATION BETWEEN ZIRCONIUM POSTS AND DIFFERENT TYPES OF CEMENTS**

<sup>1</sup>Vesna Jurukovska Shotarovska, <sup>1</sup>Nadica Janeva, <sup>1</sup>Biljana Evrosimovska, <sup>1</sup>Marjan Petkov, <sup>1</sup>Aneta Mijoska, <sup>2</sup>Jasna Simonovska

<sup>1</sup>Faculty of Dentistry, Skopje, North Macedonia

<sup>2</sup>University Dental Clinical Centre"St. Pantelejmon", Skopje, North Macedonia

**INTRODUCTION:** Zirconium post systems have long-lasting and reliable retention of the crown or bridge.

**AIMS:** The aim of this study is to demonstrate the adhesion of zirconium post systems, cemented with different types of cements, Multilink Automix (MLA)- Ivoclar Vivadent, and RelyX Unicem 2 automix (RLX)-3M ESPE.

MATERIALS AND METHODS: For this study, we used two types of resin cements: Multilink Automix (MLA)-lvoclar Vivadent, and RelyX Unicem 2 automix (RLX)-3 MESPE, 80 zirconium post with different diameter d1=1,2; d2=1,35 and d3=1,5, and extracted incisors. Zirconium posts were applied in every sample and were cemented with two types of resin cements. The Pull-out test, was applied on the prepared samples. For the test we used universal testing machine, and maximum force was measured in newtons (N).

**RESULTS:** The obtained results from the research show us that zirconium post systems are increasingly used in everyday dental practice. The extraction power of zirconium posts cemented with RelyX Unicem 2 Automix cement showed the best results with diameter d3, compared to other diameters d1 and d2.

**CONCLUSION:** It is important that the applied resin cements play a special role in the retention and adhesion of the post system in the root part of the tooth.

**Key words:** Zirconium post, Resin cements, Pull-out test.

#### **PP-31**

#### THE INFLUENCE OF FIXED - PROSTHETIC RESTORATIONS ON PERIODONTAL HEALTH

Ljubica Prosheva<sup>1</sup>, Mihajlo Petrovski<sup>1</sup>, Kiro Papakoca<sup>1</sup>, Sandra Atanasova<sup>1</sup>, Olivera Terzieva Petrovska<sup>1</sup>,

#### Pavle Apostoloski<sup>1</sup>

<sup>1</sup>Faculty of Medical Sciences, Goce Delcev University, Stip, North Macedonia

**INTRODUCTION:** Definitive fixed prosthetic restorations are cemented in the patient's mouth and should be in a harmonious relationship with the periodontium and must not affecting these tissues negatively.

**AIMS:** of this research was to determine the prevalence of periodontal changes in people with fixed-prosthetic reconstructions.

**MATERIALS AND METHODS:** The research includes total number of 40 subjects in the age range of 20-75 years with fixed prosthetic structures. For each patient during the dental examination, the following parameters were determined: the depth of the periodontal pockets (PD) and the clinical attachment loss (CAL); the degree of involvement of the furcation; the degree of gingival inflammation and the presence of gingival recession. The examination was performed only on the abutment teeth of the prosthetic reconstructions.

**RESULTS:** The average depth of the periodontal pockets among subjects was  $3.98654 \pm 0.25045$ . From data, can be noted that average amount of the clinical loss of attachment was  $5.28592 \pm 0.70523$ . According to this, it is observed that most of the subjects has a moderate form of periodontal disease. Presence of gingival recession is observed in 55% from the subjects. Furcation involvement was observed in 42.5% of the molar abutment teeth.

**CONCLUSION:** Based on the presented data, it can be concluded that there are significant changes on the abutment teeth among patients who have fixed prosthetic constructions.

Key words: abutment teeth, furcation involvement, gingival recession, periodontal status, periodontitis

#### **PP-32**

#### BIOLOGICAL CHARACTERISTICS OF MODERN POLYMER MATERIALS IN DENTAL PROSTHODONTICS

Pavle Apostoloski¹, Ivona Kovacevska¹, Mihajlo Petrovski¹, Daniela Mickovska¹, Olivera Terzieva- Petrovska¹ ¹Faculty of Medical Sciences, Goce Delcev University, Stip, North Macedonia

**INTRODUCTION:** The biological characteristics of modified high-performance polymers are relate to biocompatibility, and therefore the devices produced from these polymers comply with all biological standards and are not cytotoxic.

**AIMS:** of this paper is to evaluate the biological characteristics of modern polymer materials.

**MATERIALS AND METHODS:** In order to realize the main goal of this research, an adequate analysis of the contemporary dental and dental technical literature was done.

**RESULTS:** PEEK (Polyetheretherketone) is a material that does not contain metals, so patients do not have a metallic taste in their mouths, there is no ion exchange and they are not allergenic, and they do not cause allergies in patients who use them. Materials made of PEEK are neutral, so they have low water absorption, and these constructions have color stability.

**CONCLUSION:** The material is biologically stabile and devices made of this material are used, they do not interact with other materials and do not cause side effects. During the production of devices, there is the possibility of achieving a small thickness, and also the constructions are processed and polished easily.

Keywords: biopolymers, biological characteristics, biological stability, PEEK.

#### **PP-33**

#### **EASY AND PRECISE DENTAL PHOTOGRAPHY**

#### <sup>1</sup>Aleksandar Purdanoski, <sup>1</sup>Olivera Purdanoska, <sup>2</sup>Elena Petrova

<sup>1</sup>PHO Poliklinika Altea, Prilep, Macedonia

<sup>2</sup>University Dental Clinical Centre"St. Pantelejmon", Skopje, North Macedonia

**INTRODUCTION:** Digital photography has a huge impact in every segment of our lives and it is very hard to imagine our existence without it. The impact is so big that the phrase "an image is worth a thousand words" now is accepted as a fact. Photography has always been a part from dentistry and the biggest progress was