Session highlights global burden of periodontal disease and peri-implantitis

A symposium held at EuroPerio9 aimed to understand the effects of periodontitis and peri-implantitis on the world’s population.

Antibiotic resistance among patients with severe periodontal disease is increasing

Antimicrobial resistance is on the rise among German patients with severe periodontitis according to the findings of a study–titled “Antibiotic resistance trends in human periodontal microbiota (2008-2015)”–presented yesterday morning at EuroPerio9 by co-author Friederike Derks, specialist in periodontology at Sweden’s University of Gothenburg.

He addressed the prevalence of peri-implantitis and the diagnostic principles behind it, and presented the results of an observational study he had conducted on this topic, the largest study of its kind. The results showed peri-implantitis to be a common condition and that several patient- and implant-related factors influence the risk of moderate and severe peri-implantitis.

Severe periodontitis is estimated to affect around 743 million people globally, making it the sixth most prevalent condition worldwide, and periodontal diseases are thought to be responsible for $US$54 billion per year in lost productivity. As the prevalence of periodontal diseases rises with age, its global burden is likely to increase with a growing ageing population.

The EFP has acted quickly in response to this, with a call for global action on the burden of periodontal diseases issued by EuroPerio9 Scientific Chair Prof. Soren Jepsen, Prof. Maurizio Tonetti, Prof. Lijian Jin and Dr Joan Otomo-Corgel in a 2017 issue of the Journal of Clinical Periodontology. In addition, the current EFP President, Prof. Dr Anton Soulea, used this year’s general assembly to announce his intention to raise awareness of the importance of periodontal health for those over 60 years of age.

With more and more edentulous patients opting for dental implants, peri-implantitis has become a condition that must be addressed at all points of pre- and postoperative patient care regimens. A later state of peri-implant mucositis, periimplantitis is an inflammatory lesion of the tissue surrounding an implant, and it is often caused by the pre-existing presence of periodontal disease. Left untreated, peri-implantitis can lead to reduced osseointegration of the implant and, ultimately, implant failure.

Though there has been a great deal of research focused on the detrimental effect of periodontitis and peri-implantitis on an individual’s health, rarely has much consideration been given to the larger socio-economic impacts of these conditions. As the world’s population continues to age, the real cost of these diseases has increasingly come into the spotlight, inspiring a thought-provoking symposium at EuroPerio9.

“Global burden of disease: Understanding periodontitis and peri-implantitis” was presented on Thursday morning to a sizeable audience. Session chair Dr Ola Norderød introduced the topic and spoke about its significance in considering the true effects of these diseases. Prof. Thomas Kocher was the following speaker and discussed the contentious issue of whether the prevalence of periodontitis is ultimately declining, given the increased awareness of oral health.

Kocher’s conclusion brought mixed blessings, though it has generally been a decrease in caries in industrialised countries and periodontal diseases and periodontal disease prevalence seems to be on the decline, the increasing number of elderly people, combined with a higher number of teeth on average in individuals, will likely result in an increased burden for treatment of this condition.

“Though we have seen a somewhat dramatic improvement in oral health in some countries, thanks to the introduction of systematic preventive measures, this trend can also cause a massive increase in oral treatment, since a smaller segment of the population is edentulous,” stated Kocher.

Third to present was Dr Jan Derks, specialist in periodontology at Sweden’s University of Gothenburg. He addressed the prevalence of peri-implantitis and the diagnostic principles behind it, and presented the results of an observational study he had conducted on this topic, the largest study of its kind. The results showed peri-implantitis to be a common condition and that several patient- and implant-related factors influence the risk of moderate and severe peri-implantitis.

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Preventative care is a lifelong habit—Part 2

An interview with Prof. Dr Anton Sculean, President of the European Federation of Periodontology.

Prof. Dr Sculean, who became President of the EFP in March 2018, speaks about the reasoning behind this, as well as other important shifts in dental treatment and prevention.

How was your first European Gum Health Day as EFP President?

It was a very successful campaign, I would say. The idea of European Gum Health Day is to inform the entire population of each participating country of the importance of maintaining healthy gingivae not just for oral health, but for overall well-being and quality of life. These are the key messages that we wanted to communicate through the participating national periodontal societies, and I think we communicated them rather well.

This year’s European Gum Health Day was also the first edition to go global. By this, I mean that we had several national societies of periodontology from the Caribbean, South America, Colombia and Panama participating alongside almost all of the EFP’s affiliated national societies. It was great to see this commitment to spreading the message of “Health begins with healthy gums” adopted by these nations, and I hope that they will continue to participate in the future.

With the increase in popularity of patient-centred concepts such as motivational interviewing, do you see the role of the dental professional changing?

I think that’s a very important point to consider. We see more and more new treatment concepts being guided by a philosophy of actively involving the patient in the treatment process. If we actively involve the patient, his or her motivation to follow through with the treatment is likely to be higher and its success is thus more likely as well—without the cooperation and input of the patient, we can never achieve complete success.

In dentistry, there has been a shift away from dictating certain concepts to patients and towards involving them in the treatment process, working together to improve their oral health. This shift is a positive one, as it recognizes the importance of putting patients in charge of maintaining their oral health.

At the recent EFP General Assembly, you mentioned that, through gingival health impacts the quality of life of individuals of all ages, it could particularly affect people over 60 years of age. Why do you think this is so?

This is one of my main priorities as the EFP President. Preventative care is a lifelong habit, of course, and gingival health brings not just oral health but also over-all health, well-being and quality of life over a whole lifetime, particularly for those over 60 years of age. If one looks at demographic data regarding this issue, one can see that the world’s population is continuing to grow older and older. Life expectancy is generally increasing, and many people who are over 60 are still in excellent general health. They take action to maintain their well-being and want to extend this for as long as possible. That is why I started with this programme—if one considers that the number of people worldwide who are over 60 is currently less than one billion, but that the number is predicted to rise to 2.1 billion by 2050, it’s clear that we need to take immediate action to target this group.

What I want to achieve through this action is to repopulate this age group as one that can maintain gingival health. I want to get away from focusing on disease and instead emphasize how important maintaining and preserving their health is. I have labelled this concept “oral fitness”. By this, I mean that we shouldn’t just focus on the general fitness of our bodies, but instead incorporate the gingivae and the oral cavity into our understanding of what fitness can be.

Regarding some of the EFP’s other programmes, like those centred on the interaction between gingival health and cardiovascular disease, diabetes and so on, they have already been established and are benefiting those individuals who suffer from, or are at risk for, these conditions. However, for the bulk of the population who doesn’t have one of those conditions, maintaining their oral fitness can really benefit quality of life.

The EFP has a duty to promote gingival health, oral health and the treatment of periodontal disease. Personally, I would prefer not to have this disease in the first place and to ensure a high-quality of life and high level of oral fitness for as long as possible.

Editorial note: The first part of this interview appeared in the second EuroPerio9 today issue which was published on Friday, 22 June 2018.
New classification of periodontal and peri-implant diseases and conditions

A new global classification system for periodontal health, diseases and conditions, as well as peri-implant diseases and conditions, was announced on Friday at EuroPerio9. The outcome of a joint workshop held by the EFP and the American Academy of Periodontology (AAP) in Chicago in the US in 2017, the updated system comes almost two decades after the last comprehensive classification of these conditions and builds upon the significant amount of new evidence and knowledge that has been gained in that time.

Chaired by Prof. Maurizio Tonetti and Dr Kenneth Kornman in front of a packed house, "News from the world workshop on classification: Critical factors in periodontology" provided attendees with an in-depth look at the findings from this workshop and their clinical implications. The workshop included over 100 experts from Europe, America, Australia and Asia who reviewed existing literature to create a global consensus that enables care to be standardized for patients around the world. Pinning the experts' workflow as a "robust, inclusive and open process", Tonetti emphasized that the findings, through their unbiased nature, were intended to be as credible as possible and hopefully "project a vision that will shape the future of periodontal treatment".

Kornman highlighted how the new classification system could help to shape the direction of periodontal education and university curricula, as it recognizes and debunks some common misconceptions about how periodontitis develops. "We now know that the severity of periodontitis is not just a simple function of how much plaque is on your teeth and how long it has been there, and that not everyone is equally susceptible to this disease," Kornman said.

The comprehensive classification is based upon contemporary evidence and includes a staging and grading system for periodontitis, indicating severity and extent of disease, accounting for lifetime disease experience and taking into account the patient's overall health status. Clinical health is defined for the first time in the classification, and periodontitis is described in four stages, ranging from least severe to most severe. The risk and rate of disease progression has been categorized into three grades, from lowest risk of progression to the highest. This grading takes into account risk factors like smoking and the presence of concomitant diseases such as diabetes.

The complete review and consensus reports have been published simultaneously in the EFP's Journal of Clinical Periodontology and the AAP's Journal of Periodontology.

"The AAP and EFP are proud of this global, collaborative accomplishment," said Dr Steven R. Daniel, President of the AAP. "The result of this landmark workshop is a redesigned disease classification that guides comprehensive treatment planning and allows for a personalized approach to patient care. These proceedings will make an inedible impact on the scientific advancement of periodontal care and practice."

"This was a huge undertaking, but one of vital importance, ensuring that an international language for clinical care, research and education is established, and updating the 1999 classification system to account for rapid advances in scientific knowledge over the last 20 years. The new classification should provide a globally consistent approach to diagnosis and management and ultimately improve outcomes for our patients," added Prof. Iain Chapple, EFP Secretary General and co-chair of Group 1 of the workshop.
50 per cent of our population are susceptible to periodontal disease

An interview with Prof. Nicola West, head of restorative dentistry and the Clinical Trials Unit at the Bristol Dental School, UK.

During a unique breakfast briefing on Friday morning, Unilever’s Zendium showcased a remarkable set of data demonstrating how daily use of Zendium toothpaste improves gingival health by balancing the oral microbiome. The results are perfectly aligned with the evolving view of the pathology of periodontal disease that puts microbial balance, rather than microbial elimination, at its heart.

Today international sat down with speaker Prof. Nicola West, head of restorative dentistry and the Clinical Trials Unit at the Bristol Dental School in the UK. An expert in clinical research on the efficacy of oral hygiene products, she was the ideal conversation partner for an update on the topic.

What is the oral microbiome, and what is its significance for oral health?

The oral microbiome is the structure of the bacteria on the teeth and oral mucosa, with its proteins and natural enzymes. Ideally, the bacteria in our oral microbiome are naturally in a state of balance, that way maintaining oral health and protecting us from developing disease. The vast majority of periodontal diseases are initiated by an accumulation of biofilm on the hard surfaces of the mouth, the teeth or implants. If the biofilm is not disrupted on a regular basis by self-directed oral hygiene, it becomes dysbiotic, and we get the emergence of pathogenic strains, leading to gingivitis and, in susceptible individuals, periodontitis.

What are some of the dangers to a healthy microbiome?

A poor sleeping pattern or unhealthy lifestyle choices such as smoking. Pregnancy is a risk factor too, owing to the hormonal changes happening in the body, and the fact that there are hormone receptors in the mouth. Lastly, a healthy diet is very important. We should be eating and drinking more natural products instead of the processed forms we eat a lot of the time, like honey in the Mediterranean diet, to give just one example. It is important to get the physical effect of our nutrition in the mouth instead of just swallowing it and getting the systemic reaction afterwards. Honey is actually a marvelous natural ingredient containing a lot of natural protective agents, as much so that I actually have started keeping my own bees.

You also mentioned stress as a possible risk factor. Could you explain why that is?

We know that there are stress pathways linked to the mouth. When it comes to periodontal disease, people either are or are not naturally susceptible to it. If one is susceptible, stress is one of the contributing genetic and epigenetic risk factors. All in all, 50 per cent of our population are susceptible to periodontal disease—which is huge number. When we look after patients, we can definitely see a difference in stability in the periodontal condition between people who are stressed and those who are not. In people who do not cope well with stress, one can actually see changes in saliva production, sleeping pattern, pocket formation and so on.

Lastly, how has EuroPerio been for you so far?

I think it is a fantastic event. It is buzzing, isn’t it? It is busier than the last one we had in London, and I just think this is the place to be. For me, it is an opportunity to network and exchange ideas with all the experts on periodontology from all around the world. It is very friendly and well organised, and the programme is just amazing.

A new book aims to make periodontology palatable

An interview with Dr Michele Reners, EuroPerio9 Congress Chair.

Running two private dental practices in the Belgian city of Liège, lecturing in Belgium and France, collaborating with the University of Liège as an internship supervisor for young periodontists, and serving as Editor-in-Chief of the French dental journal Information Dentaire, Dr Michele Reners has many roles. As EuroPerio9 Congress Chair, Reners has been key in putting together an amazing programme that is just amazing. It is very friendly and well organised, with a great buzz and atmosphere.

Who is the book aimed at?

Above all, the book is practical. As such, it is mainly aimed at dental students and older general dentists. The aim is to help students understand the subject better, but it is also a book to keep practical dental professionals up to date on some topics. That is why the first chapters of Periodontology Made Easy cover the etiopathology of periodontitis, for example. Periodontology is a complex and multifaceted science, and I think it is important to get the physical effect of our nutrition in the mouth instead of just swallowing it and getting the systemic reaction afterwards. Honey is actually a marvelous natural ingredient containing a lot of natural protective agents, as much so that I actually have started keeping my own bees.

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