Dear reader,

How is your practice doing? If the answer to this question is ‘fine’, chances are high that you are living in a part of the world where people still visit their dentist on a regular basis. Unfortunately, the same cannot be said for all members of the profession. Latest reports suggest that more and more patients around the world are postponing their dental visits due to recession-related financial problems. In the UK, for example, almost one million less people have had their teeth checked since 2008. More than 60 per cent of 1,000 adults in the US have also cut back on dental visits and similar reports are now coming from Australia.

These numbers are of significant proportions. They not only indicate a considerable loss of income for dentists and perhaps even the closing of some dental offices, they are also a setback for those who are constantly fighting to bring the oral health message into the minds and attitudes of people. Whether these reports are drawing a realistic picture or not, they certainly demonstrate that many people do not consider their oral health as something to watch over at the moment.

Organisations like the World Dental Federation or the WHO have tried to raise awareness for the need of dental care to be an essential part of primary health care services in the last few years. Unfortunately, their achievements could be in vain since governments are changing their priorities and leaving health behind in order to balance national budgets. Therefore, joint efforts of politicians, health care professionals and, up and foremost, dentists are necessary to convince people to invest in their oral health again.

Free dental missions may be a good tool to help a few people but they are like giving lessons to a child that doesn’t want to learn. Out of sight is out of mind.

Yours sincerely,

Daniel Zimmermann
Group Editor
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Dental Tribune welcomes comments, suggestions and complaints at feedback@dental-tribune.com

Dental Tribune Internatio

Opinion

Dentistry making great strides in automated production.

Stem-cell based dental implants for tooth replacement

Andrea Mantesso
Brazil

Understanding the properties of mesenchymal stem cells is a fundamental goal in stem cell biology and a growing number of studies demonstrate the presence of stem cells in various tooth areas. Dental stem cells have been isolated from the dental pulp of deciduous and permanent teeth, the periodontal ligament, the dental follicle, and the root apical papilla. These cell populations reside in low numbers in the teeth and have differing capacity to form tissues. They are not only diverse in terms of origin, but may also behave differently depending on the technique used for their isolation and on the culture conditions. Thus, the analysis of their properties is very complex and they are not yet fully understood.

These cells are undoubtedly potential sources of cells for tissue engineering and dentistry. For this, two main goals could be achieved: the repair of partially lost dental structure and the creation of a new, complete biological tooth.

Tooth loss is a common consequence of many dental diseases, especially amongst the ageing population. The current replacement methods for tooth loss include artificial dentures and metal implants. This replacement of a naturally occurring physiological tissue with an artificial material has been used in dentistry since antiquity without significant changes to the implantation procedure, only changing the synthetic materials used.

Diverse techniques for creating a biological tooth have been described in the literature. For this, some have used a combination of scaffolds built in the shape of a tooth seeded with stem cells. Others have used different combinations of cell types, including non-dental stem cells with the capacity to form bio-teeth. The process of forming bio-teeth can be complex, as various materials can be used as scaffolds, cell numbers can be varied and alternative methodologies can be used to aggregate these cells.

The use of dental stem cells indicates a new paradigm in dentistry and will revolutionise the way we practise dentistry. In the future, dentists may be able to isolate and manipulate live cells and the entire environment of a dental surgery will be adapted to fit these procedures. Patients will be accorded the opportunity to have fully functional and longer-lasting teeth that perfectly match their existing teeth. Bio-teeth will provide a less invasive and thus better alternative to artificial implants, as the procedure for implanting a small aggregate of cells is simple and will generate an organ with all the necessary tissues, such as the periodontal ligament and the dental pulp.

“The use of dental stem cells indicates a new paradigm in dentistry”

Andrea Mantesso

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On dentine hypersensitivity in Malaysia

Lee Soon Boon
Malaysia

The Malaysian Dental Association (MDA) views the high prevalence of dentine hypersensitivity, reaching 35 per cent of the adult population, in Malaysia with great concern. A two-pronged approach was planned in collaboration with GlaxoSmithKline (GSK) Malaysia earlier this month to address the concern: firstly, by educating the Malaysian chronic disease and media on the relevant facts regarding dentine hypersensitivity, in order to encourage dissemination of accurate information about the problem to the Malaysian public for improved preventive and treatment care; and secondly, by inviting international experts on dentine hypersensitivity to speak to Malaysian dental professionals, in order to inform them of the latest preventive measures and effective clinical management of dentine hypersensitivity.

The MDA and GSK Malaysia & Singapore lectured intensively on aetiological factors, such as endogenous and dietary acids, traumatic tooth-brushing, habit and other predisposing factors. Effective combinations of home use of desensitising dentifrices and an array of in-clinic treatment modalities were highlighted to help patients suffering from dentine hypersensitivity. Measures for the early detection of dentine hypersensitivity and preventive measures to avoid exposition of the dentine layer of the teeth were also advocated to the general public.

It was generally acknowledged that dentine hypersensitivity is not fully appreciated by many dental practitioners in Malaysia, resulting in cases of early or minimal sensitivity not receiving appropriate treatment until they worsen. Thus, it was determined that the MDA, in working towards providing optimal oral health care to the nation, must engage dental professionals with the most up-to-date knowledge and skills regarding the clinical management of dentine hypersensitivity. This will be done in the form of a two-day scientific meeting from 16 to 17 January 2010, at which eminent international experts on dentine hypersensitivity will share their expertise with Malaysian dental professionals.

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