Better treatment of autistic children

Treatment of autistic children can be challenging even for experienced clinicians. According to research of the Plymouth University Peninsula Schools of Medicine and Dentistry, key factors for a less stressful visit to the dental practice were how confident parents behaved and how good the communication between parents and treatment staff was. Supported by the National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care South West Peninsula, the research was conducted in partnership with the Peninsula Cerebra Research Unit (PenCRU) and members of the PenCRU Family Faculty, a group of parents of disabled children. Based on interviews with parents of autistic children, the study found that they particularly reacted to negative feelings and the attitudes of those around them in the treatment room. In addition, it was found that parents should feel confident to advocate for their child’s individual needs, as well as help dental professionals understand the small changes they could incorporate to make a big difference. If the children were given a say about small things involved in their treatment, e.g. the colour of mouthwash or brightness of the lights, their experience was significantly better. Furthermore, clear referral pathways to specialist dental services will be needed to avoid any delay and distress for families whose children are not yet able to cope with conventional dental settings.

Periodontal treatment achieves Improved control of type 2 diabetes

Several studies have indicated a probable association between poor oral health and type 2 diabetes, and it was found that if uncontrolled it leads to gingivitis and periodontitis. Spanish researchers have now discovered further evidence for the connection between periodontitis and type 2 diabetes. Their recent study “Benefits of non-surgical periodontal treatment in patients with type 2 diabetes mellitus and chronic periodontitis (…)” showed that control of type 2 diabetes improved notably after the patient underwent scaling and root planing using ultrasound and curettage.

Head of the study Dr Miguel Viñas, Professor of Microbiology at the University of Barcelona stated that a relation does not only exist between going from diabetes to periodontal diseases, but also from periodontal disease to diabetes. 90 patients with type 2 diabetes participated in the research and were randomly assigned to either the treatment or the control group. Treatment group participants received oral hygiene instructions and underwent scaling and root treatment. “The main conclusion of the study is that non-surgical treatment of periodontitis improves the glycaemic status and the levels of glycated haemoglobin, and therefore proves the great importance of oral health in diabetic patients,” summarised Prof. José López, medical director of the university’s dental clinic.
Scientists from Northern Germany are currently working on an interdisciplinary approach for a new implant technology. The research project funded by the Ministry of Economic Affairs of the German state of Mecklenburg-Western Pomerania combines project partners from both science and economy, including the Institute of ImplantTechnology and Biomaterials, an Associated Institute of Rostock University.

In order to properly load implants into the jaw, it is often necessary to stimulate bone regeneration or use bone replacement material. The healing process of the latter has so far been more complicated and time-consuming. The project team is therefore researching the possibilities of colonising the bone material with stem cells of the patient. The stem cells’ potential of stimulating bone growth and regeneration shall thus improve the healing process.

The main goal of the scientific research cooperation is to develop a procedure for the even colonisation of bone material with stem cells. The researchers have thus developed a so-called bio reactor in order to manage this process under specifically defined environmental conditions. The development of such a reactor prototype has been a milestone in the research project. The first stem cell colonisation experiments have already shown promising results. If and to what extent the colonised material can reduce the implant healing time will be further researched until the end of 2019.

Source: Rostock University

Stem cells might

Accelerate implant healing

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