Dental routine practised among early inhabitants of China

JINAN, China/OXFORD, UK: Early ancestors of humans who lived in Eastern China almost half a million years ago might have regularly used toothpicks, anthropologists have recently suggested in the specialist journal Quaternary International.

In several fossil teeth recovered from a Middle Pleistocene site in Yiyuan near the capital Beijing, they found interproximal grooves, which they believe signifies the habitual use of sticks made from hard material to remove residual food particles from teeth.

According to the scientists, the findings are the first evidence of the habit ever recorded in Eastern China, along with other Pleistocene fossils from the country, it also confirms the hypothesis that the earliest use of tools was by the Homo genus, they said. To date, it remains unclear, however, whether the grooves found in the enamel and root surfaces of the teeth indicate a therapeutic purpose.

“It has been suggested that the use of toothpicks is unique to the genus Homo, and tooth-picking could have accompanied the dietary shift to heavier reliance on animal protein. Thus, in Yiyuan teeth, the proposal that tooth-picking with a hard needle-like stick was used to remove food particles caught between teeth to relieve gum pressure is likely to be very plausible,” the authors commented in the article.

In total, the researchers examined seven teeth from three individuals under a binocular microscope and scanning electron microscope. Two of the teeth exhibited interproximal grooves of different depths, which are characteristic signs of tooth-picking. Similar markings on the teeth of other Homo species found in different sites around the world have previously been reported.

The remains from the Yiyuan site, which included cranial fragments and was excavated by archaeologists in 1981, have been assigned to the Homo erectus species, which is widely considered to be a direct ancestor of modern humans and other human species, such as Neanderthals. Archaeological findings indicate that the species inhabited large parts of Asia, Africa and Europe between 1.8 million and 40,000 years ago.

SINUS LIFT PROCEDURES IN THE DAILY PRACTICE
Daniel Rothamel
06:00 PM (CST)

Sinus grafting procedures are an established therapy to gain bone height in the posterior maxilla. Depending on the remaining bone height, they can be performed with simultaneous or two-stage implant placement using osteotomes, a trans-alveolar or lateral-window approach.

Numerous studies have shown predictable results using autogenous bone but also bone substitute materials. However, within the last decade, the role of autogenous bone as the “golden standard” for sinus grafting procedures has been increasingly questioned.

In the webinar, different approaches of sinus grafting procedures, the selection of different bone substitute materials, clinical and histological results and a sufficient complication management will be discussed.

ITALIAN NEWS

DT Asia Pacific

© 2014, Dental Tribune International GmbH. All rights reserved.

Dental Tribune makes every effort to report clinical information and manufacturer's product news accurately, but cannot assume responsibility for the validity of product claims, or for typographical or other errors contained in advertisements, for product names or claims, or statements made by advertisers. Opinions expressed by authors are their own and may not reflect those of Dental Tribune International.
Probiotic bacteria found helpful in orthodontic patients

SONGKHLA, Thailand: A new study has provided additional evidence that probiotics are beneficial against a number of oral conditions. Researchers in Thailand recently found that lactobacilli in particular could help reduce levels of mutans streptococci, which can cause dental caries, especially in cleft lip and palate patients with fixed orthodontic appliances.

The study included 50 cleft lip and palate patients who had been undergoing treatment between June and August 2011 with fixed orthodontic appliances for at least three months with attachments on at least 20 permanent teeth. For a period of four consecutive weeks, half of the patients consumed milk powder with probiotic Lactobacillus paracasei SD1 in 50 ml of water once a day, while the remainder received the same amount of milk powder in water but without probiotic bacteria.

From an analysis of participants’ saliva samples, the researchers observed a significant reduction in salivary mutans streptococci after the four-week period in the first group. In addition, a significant increase in salivary lactobacilli was noted in this group.

The results suggest that especially orthodontic patients, who usually need treatment owing to irregularities in tooth size and misalignment of teeth, could benefit significantly from probiotic intervention because fixed appliances facilitate the colonisation of bacteria such as mutans streptococci and render this group more susceptible to dental diseases. However, further long-term studies with a larger sample size are needed to clarify the mechanisms of probiotic bacteria in reducing oral microbial counts, the researchers concluded.

Australia to cut dental spending

CANBERRA, Australia: The Australian government intends to scrap over half a billion Australian dollars worth of subsidies for dental health care from its next federal budget. Among other cut-backs, the proposed plans will see the end of the Dental Flexible Grants Programme, which was originally introduced to help dentists set up in outer metropolitan areas. This way, the government aims to save almost A$229 million (US$211.5 million) over the next four years.

Another A$390 million (US$360 million) is to be put aside by delaying a federal–state partnership programme that was intended to support local governments in providing public dental health care services. Dental and oral health clinic developments at Charles Sturt University in Sydney will also be halted.

In return, the government said it will put A$2.7 billion (US$2.49 billion) into new programmes, such as the Child Dental Benefits Schedule.

The measures are part of a larger cut-back of federal medical subsidies that will require patients to pay more out of pocket for visiting a doctor or basic medical services, such as having an X-ray taken. According to the government, the savings from these measures will go into a A$2 billion (US$1.85 billion) medical research fund to advance therapies for systemic conditions, such as cancer.

Overall, the government expects to accumulate A$80 billion (US$73.9 billion) in combined savings from the health and education sectors over the next ten years.

Representatives from dentist and patient organisations have already criticised the plans, which they think will further burden the already extensive waiting list for public dental treatment. President of the Australian Dental Association Dr Karin Alexander told ABC News that she expects that the waiting list could double or treble owing to the cut-backs.

It is estimated that up to half a million people are currently on a public waiting list for dental treatment.