Rare oral condition declared an autoimmune disease

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NEW YORK, USA/LEIPZIG, Germany: Patients suffering from a very rare condition that affects the oral mucosa may soon be offered some relief by new research conducted in the US. In a recent study, scientists from Tufts University near Boston claim to have found evidence that chronic ulcerative stomatitis (CUS), characterised by recurring and painful ulcers, is mainly caused by an autoimmune response by the body that destroys the lining of cells inside the surface tissue layer of the mouth.

According to the scientists, only a dozen cases of CUS have been reported worldwide since the condition was first clinically identified in 1989 but the number may be higher, as patients may remain undiagnosed owing to the extensive testing procedure and low awareness amongst dental clinicians. While it was known that patients with CUS have specific auto-antibodies, researchers had not been able to determine the extent to which these contributed to the condition. With help of the new findings, CUS could now be classified as an autoimmune disease in order to allow better management of the symptoms.

Owing to its unique resistance to standard medication like corticosteroids, successful treatment of CUS has been achieved only in some cases through hydroxy-chloroquine, a prescription drug primarily used to prevent malaria, as well as to treat rheumatoid arthritis and lupus. By better understanding the mechanisms linking the autoimmune response to ulcerative sores, new approaches could be developed to treat patients suffering from the condition, the scientists said.

So far, CUS has been found chiefly in middle-aged Caucasian women. It can only be mistaken identified as oral erosive lichen planus, another more common chronic condition affecting mucosal surfaces and also thought to be an autoimmune disease. CUS chiefly occurs in middle-aged Caucasian women. (DTI/Photo Prof. Robert Reisz, Canada)

Southern India troubled by fluoride

The health of residents of Bangalore and neighbouring villages in India is under threat by increasing levels of natural fluoride in their drinking water, the national newspaper The Hindu reports.

According to the latest tests by the country’s Department of Mines and Geology, the amount of the mineral found in water reservoirs beneath the city recently exceeded the limit for human consumption by 400%. If consumed over a long period, high amounts of fluoride can significantly contribute to skeletal and dental fluorosis, a condition that weakens bones and teeth.

Experts said that the five-year high may be due to deeper sunk wells that strike fluoride-rich ground water at depths of 500 metres. Composite resin Reconstructing an anterior dentition

Ortho study gives HK people a bad note

People in Hong Kong should brush up on their knowledge of misaligned teeth (malocclusion). According to a new survey conducted by the city’s Society of Orthodontists on more than 1,800 participants, four in five people did not know that it can lead to long-term dental complications, such as temporomandibular disorders or impaired speech and chewing dysfunction. Most saw major consequences for their social life, including loss of attractiveness and self-esteem due to conditions like crowded teeth, crossbite or overbite.

The findings confirm results of earlier studies that showed that Hong Kongese generally lack knowledge of the consequences of bad oral health. The last national survey on the matter conducted in 2001 revealed that only 50 per cent of adults seek regular dental check-ups. Over 50 per cent also considered tooth loss as a nature-eventuality in life. In terms of oral health, Hong Kong currently ranks similar to other developed countries in the region.

Mouth enzyme could fight caries

Japanese researchers have discovered that the FrxA enzyme produced by the Streptococcus salivarius bacteria, a harmless inhabitant of the human mouth, inhibits the development of oral biofilms or plaque. The discovery could lead to more efficient oral health products to fight caries.

Dental stem cell bank expands

India’s first private dental stem cell bank has announced plans to expand into 10 major cities including Chennai and Bangalore within this year. Founded by Stemade Biotech, an Indian-French joint venture, the institution currently operates two branches in Mumbai and New Delhi.