GUM DISEASE REVERSED IN LAD PATIENTS

Researchers have discovered the cause of severe periodontitis in patients with LAD, a life-threatening disease that often results in tooth loss in early life.¹

Leukocyte Adhesion Deficiency Type I (LAD) patients are prone to bacterial infections due to a lack of a molecule required by neutrophils, a type of white blood cell that forms an essential part of the immune system. Historically, severe periodontal bone loss has been attributed to the lack of neutrophils going to the site of the periodontal infection. Until recently LAD periodontitis was treated with broad-spectrum antibiotics and mechanical removal of the biofilm.

Compared to otherwise healthy people with gum disease, LAD patients have high levels of interleukin-17 (IL-17) and IL-17-expressing cells in their gum tissue. IL-17 encourages inflammation and bone loss, suggesting the lack of neutrophils to control bacteria is not the source of the problem. Treatment with antibodies to IL-17 in LAD mice models arrested inflammatory bone loss and reduced the bacterial burden. These findings support an IL-17 targeted therapy as an effective way to treat periodontitis in LAD patients.

Several IL-17 inhibitors have been tested in treatments for other inflammatory diseases, such as rheumatoid arthritis, ankylosing spondylitis and psoriasis, with promising effects.

1. Moutsopoulos N M, Konkel J, Sarmadi M *et al*. Defective neutrophil recruitment in Leukocyte Adhesion Deficiency Type I disease causes local IL-17-driven inflammatory bone loss. *Sci Transl Med* 2014; **6**: 229ra40.

BY LAURA PACEY

HONOURS, AWARDS, APPOINTMENTS

Birthday honours – oral health

Selina Thea Alexander Master has been appointed MBE in the Queen's Birthday Honours list for services to vulnerable people and improving oral health. Dr Master qualified in 1976 and is National Dental Lead of Virgin Care. She has spent the majority of her career working within the Salaried Dental Services, as a clinician and as a clinical director, managing special care dental services.

Birthday honours – dental technology

Anthony David Griffin has been appointed MBE in the Queen's Birthday Honours 2014 for services to dental technology. Mr Griffin has been a dental technician for over 40 years, is the Chair of the Faculty of General Dental Practice (UK)'s Dental Care Professional Advisory Board and former President of the Dental Technicians Association.

Practice of the month

NHS Dentist, Fulham, is the Mouth Cancer Foundation's Practice of the Month for June. The practice, who are dedicated to 'providing dentistry to the highest standards entirely within the NHS', has proven they go above and beyond to implement the charity's Mouth Cancer Screening Accreditation Scheme.

TESCO TO REMOVE SWEETS FROM CHECKOUTS

It has been widely reported in the mainstream press that Tesco is to remove sweets and chocolates from all of its checkouts by the end of the year. The move follows a survey in which 65% of customers said it would help them to make healthier choices.

Large Tesco stores already do not display sweets at the checkouts, but this will now apply to smaller Tesco Express and Tesco Metro stores as well.

The move has been welcomed by Mumsnet, the National Obesity Forum, and charity Sustain.

FIRST NEW DENTAL HOSPITAL AND SCHOOL IN 40 YEARS OPENS

The first new dental hospital to open in the UK in almost 40 years has officially opened its doors in London's Whitechapel.

Queen Mary University of London's (QMUL's) new dental school, embedded within the new Barts Health NHS Trust dental hospital, houses the most modern and technologically advanced dental facilities in the UK following more than a decade of planning and work costing £78 million. It will provide care for the 70,000 patient appointments which take place at the hospital each year.

Dr Philip Taylor, Clinical Director for Dentistry, and Dr Wendy Turner, Head of Centre for Adult Oral Health, led invited guests on a tour through the stunningly modern, light and spacious new facilities on 12 June.

The Royal London Dental Hospital will conduct world-leading treatment and research in areas such as maxillofacial surgery, facial

trauma, haemophilia and Bechet's syndrome. Staff are also pioneering new and unique monitoring of eating disorders using advanced and rare facial and body scanning equipment - which was demonstrated to guests on launch day by Lifong Zou, Clinical Scientist in Orthopaedics.

QMUL will train around 400 dental students in the new facilities each year, making up an active part of the hospital's clinical workforce. It also offers the Diploma in Dental Hygiene and Therapy which has been running for

over 30 years, with dental hygiene and therapy students learning alongside 2nd and 3rd year undergraduate dental students. The new facilities aim to significantly improve the educational experience for all dental students, providing access to cutting edge technology and training.

The new design of the Royal London Dental Hospital stemmed from collaboration with dentists and dental nurses, enabling staff to lead the way in patient care, education and clinical research.

Dean for Dentistry at QMUL, Barts and The London School of Medicine and Dentistry, Professor Mike Curtis, said: 'We are extremely proud to be situated in Whitechapel, teaching and providing clinical care to the thriving and diverse populations of East London. Our local communities face some of the most challenging health needs of anywhere in the UK, and the new dental hospital has a key role to play in benefitting our community'.