

DIARY

JANUARY

British Academy of Cosmetic Dentistry Study Club: Impression free dentistry: are we there yet?

Date: 26 January 2010

Venue: British Dental Association, London
www.bacd.com

FEBRUARY

The National Association of Prison Dentistry UK Annual Conference

Date: 5 February 2010

Venue: Birmingham Botanical Gardens & Glasshouses
www.napduk.org

Dental Forum 2010

Date: 4-6 February 2010

Venue: Vincennes, The Parc Floral, Paris
www.dentalforum2010.com

7th International Orthodontic Congress

Date: 6-9 February 2010

Venue: Sydney, Australia
www.wfosydney.com

BDA Seminar – Dentistry in the UK

Date: 11 February 2010

Venue: British Dental Association, London
www.bda.org

MARCH

AADR/CADR Annual Meeting

Date: 3-6 March 2010

Venue: Walter E. Washington Convention Center, Washington DC
www.aadronline.org

World of Health IT Conference and Exhibition

Date: 15-18 March, 2010

Venue: The Convention Centre, CCIB, Barcelona
www.worldofhealthit.org

BREAKTHROUGH IN UNDERSTANDING OF OSTEOPOROSIS

Scientists at Queen Mary, University of London have uncovered fundamental differences between the bone which makes up the skull and the bones in our limbs, which they believe could hold the key to tackling bone weakness and fractures.

According to lead author Dr Simon Rawlinson, Lecturer in Oral Biology at Queen Mary, University of London, it is well known that bones in the arms and legs become weak and vulnerable to breaks when they are not maintained by weight bearing exercise. However skull bone, which bears almost no weight, remains particularly resistant to breaking.

The new research, published online on 18 December 2009 in open access journal *PLoS ONE*, offers an explanation for this phenomenon. The researchers say that their new understanding of the differences between the two types of bone could lead to new ways to treat or prevent osteoporosis.

The researchers wanted to understand why the skull bones are resistant to bone thinning as they age, even in post-menopausal women. To investigate this, they looked in detail at rat bone cells from the skull and compared them with cells from limb bone.

They found differences between the appearance of the cells and how they behaved in the lab. They also noticed that treating the cells with oestrogen had a far greater effect on the cells from the limb bone.

Because the differences are so profound, the researchers believe that they are set very early on in life – probably when the bones are still forming in the womb. The researchers also made a detailed genetic study of the two types



of bone cell. They looked at which genes were active in the two types of cell and found a startling level of difference between the two.

A total of 1,236 genes – around four per cent of the genome – were showing different levels of activity in the two types of bone cell. Among these were a number of genes which are known to be involved in the process of forming healthy bones.

Dr Rawlinson explained, 'This research is exciting because it tells us why our skulls remain so tough as we age compared to the bones in our arms and legs. Now we understand this phenomenon better, we also understand osteoporosis better. And this has opened up many new lines of research into how the disease could be treated or even prevented.' The research was funded by the National Institute for Health Research and the Medical Research Council.

SURVEY EXPLORES BENEFITS OF BRACES

New research from Ipsos MORI commissioned by the British Lingual Orthodontic Society (BLOS) indicates that 18% of the population of England and Wales believe their teeth would benefit from straightening with braces.

The survey of 877 people in England and Wales aged 15 and over was

carried out to assess awareness, attitudes and experience of orthodontics with a focus on lingual braces, which are fitted behind the teeth.

Lingual braces are suited to people who do not want their braces to be visible or who want treatment to be discreet. The research found that 72% of the British population is unaware of the lingual option.

The survey also found that people

living in the South East are more likely to believe they need braces. Of those living in the South East of England, 30% felt their teeth would benefit from orthodontics compared to 7% of those living in the South West. Asked whether they would consider giving orthodontics as a present to a friend or a loved one, 6% of those interviewed said they definitely would, equating to 3.1 million people in England and Wales.