

Routine dental X-rays to flag osteoporosis alerts

By ArabianBusiness.com staff writer on **Tuesday, 01 April 2008**

A software system that can detect osteoporosis by automatically scanning routine dental X-rays has secured a commercial deal that could see it installed in dental practices worldwide.

The technology, which was developed by a team from the University of Manchester's School of Dentistry, UK, automatically detects jaw cortex widths of less than 3mm - a key indicator of osteoporosis. The system then alerts the dentist.

The University of Manchester received a €1.4m EU grant in 2003, to conduct a study of women's X-rays in the UK, Sweden, Belgium and Greece



The software was developed with the help of a grant from the European Union.

The team tested 652 women for osteoporosis using the current gold standard bone density test, identifying 140 sufferers. The X-ray system was subsequently able to accurately diagnose over half of these.

"This cheap, simple and largely automated approach could be carried out by every dentist taking routine x-rays, yet the success rate is as good as having a specialist consultant on hand," said Keith Horner, professor of oral and maxillofacial imaging and co-developer of the system.

In a real-life situation, these women would immediately be referred for conclusive DXA testing.

The results of the study, which have recently been published, prompted Swedish company, Crebone AB, to make an initial investment in the system. The firm has secured the rights to sell the software until 2010.

"We're very excited about this product because we know it has enormous potential," said Horner. "As it works as part of a routine dental appointment, it could have substantial benefits...in countries with private healthcare, Osteodent could also be very lucrative to dentists.