

Hygiene / Therapy Abstracts 2011

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Resistance to oral hygiene in nursing homes

This Norwegian study explored nursing home residents' oral hygiene and their nurses' assessments of barriers to improvement. Three hundred and fifty eight patients in eleven nursing homes were examined and 494 nurses in the same homes participated in a questionnaire study. It was found that 40% of patients had unacceptable oral hygiene with several individuals resisting being helped. Eighty per cent of nurses believed that oral health was important whilst 9% found cleaning a patient's teeth unpleasant. Half of the nurses stated that they did not have time to provide regular oral care and 97% experienced resistant behaviour by patients. It would appear resistance by patients is a major factor in the poor standard of oral hygiene seen in their mouths.

Willumsen T., Karlsen L. et alia Gerodontology pub on line DOI: 10.1111/j.1741-2358.2011.00554.x October 2011

Chlorhexidene rinses do not prevent caries

A panel of the American Dental Association which has reviewed non-fluoride caries preventing agents has reported that whilst chlorhexidene and thymol in a varnish can prevent root caries, chlorhexidene rinse is probably useless against caries of all kinds. Most dentists agree that proper hygiene, diet and the use of fluoride can help prevent caries but there is little consensus on what else works. The panel cites several studies of the use of chlorhexidene liquid and gel for coronal caries and found no statistical difference with the use of a placebo. However it states that xylitol chewing gum marginally reduces caries in children and that xylitol lozenges or candy could be beneficial for those children with active caries but that there is not enough evidence for using triclosan or iodone against caries.

Rethman M. et alia J. Am. Dent. Assoc. 142.1065-1071. September 2011

Home items a reservoir for MRSA?

An American study in 2005 showed that the annual rate of community acquired MRSA in individuals who had not recently been in hospital or a nursing home was 18 cases per 100,000 people in Baltimore and 26 cases per 100,000 individuals in Atlanta. However, as recent reports have indicated that there has been a dramatic increase in the number of affected individuals, Dr J. Knox of the Department of Epidemiology at Columbia University began a study to compare the households of 146 individuals who came to the university hospital for MRSA treatment with the households of 145 dental clinic patients. Nasal swabs were collected from household members and household items for both categories of patients tested. It was found that 58% of the household members of the group with MRSA tested positive for the resistant staphylococci as did 50% of household items. In contrast, 37% of household members of the dental patients carried the organism and less than 30% of household items from these homes were contaminated with the resistant organisms. In addition, identical strains of MRSA were found in 2 or more members of households in 38% of hospital treated people as compared with 18% of the other group's homes.

Knox J. Paper presented 56th Intersc. Conference Antimicrob. Agents & Chemo 2011

Insufficient new antibiotics being produced

Infections which are resistant to all current antibiotics are occurring more frequently but several large pharmaceutical companies have ended the research and development of new antimicrobials. Dr Boucher of the Tufts University School of Medicine in Boston states that only 9 intravenous compounds active against Gram negative bacteria are in development as are 8 compounds against skin infections. It is thought that it will take up to 4 years for these products to be produced, found safe and effective in human trials and then approved for use by the Food and Drug Administration. Worryingly, there are no antibiotics being developed which are effective against certain types of pneumonia and blood stream infections.

Boucher H. et alia Infect. Diseases Soc. America 497 Annual Meeting 2011

Gum disease increases time of conception

This study led by Roger Hart, professor of Reproductive Medicine at the University of Western Australia, investigated whether the presence of periodontal disease in women influenced the time of conception. The study was a single centre randomized controlled trial of treatment for periodontal disease in mid-pregnancy conducted at seven sites in one city. Periodontal disease was defined as pockets greater than 4 mm deep at 12 or more probing sites in fully erupted teeth. The patients also received a questionnaire containing questions related to the time taken to conceive, whether the pregnancy was planned and whether fertility treatment was necessary. Of the 3,737 pregnant women in the study, outcomes were available for 3,576 women. It was found that women with gum disease (26%) took an average of just over 7 months to become pregnant whilst those without gum disease on average became pregnant in 5 months. One hundred and forty women took longer than a year to conceive - they were more likely to be non-Caucasian, to smoke and to have a body mass index over 25kg/m². These results reported to the European Society of Human Reproduction annual meeting in 2011 are the first to suggest that periodontal disease might be one of several factors which could be modified to improve the chances of pregnancy.

Hart R., Doherty D., et alia Hum. Reprod. 26 (Supp 1) 170. 2011