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ABSTRACT

CONCLUSIONS: Probiotics could be a valid support for oral health, through mechanisms of competition with periodontopathogenic species, their protective action towards hard and soft tissues and their ability to work synergistically with antibiotic therapy and SRP techniques. They could reduce periodontal indexes and promote a good balance of the resident microflora. Accordingly the significance of the data collected in this study, emerged that professionals has few and confused knowledge about probiotics for oral health. Probiotics are more known by the class of dental hygienists. Furthermore, the most encouraging data showed that high percentages of professionals, declared the wish to receive further information about probiotics and their application in the dental field to corroborate knowledge and strategies of causal and noncausal intervention.

## Oral health conditions and cardiovascular diseases in elderly italian patients

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BACKGROUND: The objective of this study was to investigate the associations between oral health status and presence of cardiovascular diseases (CVD) in elderly patients.

METHODS: The study population consisted of 533 patients (308 females, 225 males) aged 65 to 98 years. The mean age of patients was 73.93 (±7.8 standard deviation (SD)). Patients were asked to visit the Geriatric Dentistry Department of "Policlinico Umberto I" of Rome for a routine check of their oral health status. All subjects gave informed, signed consent to participate in the study. A predesigned medical history questionnaire including social status, habits, medical history, general health and drug assumption were filled by each patient. Medical history, particularly focused on CVD and common atherosclerotic risk factors (arterial hypertension, diabetes, body mass index, etc.) have been recorded. Dental status was detected measuring the Decayed, Missing, and Filled Teeth (DMFT) and Community Periodontal Index (CPI) indexes. Geriatric Oral Health Assessment Index (GOHAI) was also used to evaluate masticatory function. oral self-perception and psychosocial impact on patients. The chi-square test with a 95% confidence level was used to assess qualitative variables. Odds ratios (ORs) and stepwise logistic regression were used to calculate risk estimates; the independent variables: age, gender, DMFT, CPI index, GOHAI index score, and tooth loss were included in the statistical model. P value <0.05 was considered a statistically significant cut-off.

**RESULTS:S:** The mean of the DMFT was 13.8 (SD: 7.1). Among all patients, 8.6% (n = 46) had more than 12 decayed teeth, 43.7% (n = 233) had more than 12 missing teeth. A total of 122 patients (52.4%) had more than 18 missing teeth. No difference between females and males was seen in DMFT and CPI index. GOHAI data were worst for females and it significantly decreased with age. Vascular diseases affected 69.8% of subjects (n = 372). Patients with CVD had less education and oral care (P < 0.05), higher CPI index and lower of filled teeth (P < 0.05). Moreover, the number of missing teeth was higher in patients with vascular disease and patients with more than 18 missing teeth have 2.5 times greater risk of CVD. CVDs are also associated with type 2 diabetes mellitus, underweight, and obesity (P < 0.05). CONCLUSIONS: From the finding of this study, it can be confirmed a significant link between CVD and oral health. A cooperation among geriatrician, cardiologist, and dentist is suitable to counteract the development of CVD and to early identify patients risk of CVD.

## Long term evaluation of oral health indices in patients who undergone head and neck radiation therapy in association with vitamin E (case-control group)

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BACKGROUND: Most head and neck cancers are squamous cell carcinomas that develop in the upper aerodigestive epithelium (oral cavity, pharynx, larynx) after exposure to carcinogens such as tobacco, alcohol, or to some virus (HPV, Epstein Barr). Treatments for this kind of cancer are: surgery, radiotherapy and chemotherapy, which are often combined. Many are the complications associated with radiotherapy such as xerostomia, mucositis, caries, trismus, candidiasis, dysgeusia, dysphagia and osteoradionecrosis. Management of oral health is especially important in order to limit side effects. Therefore, the aim of this study was to evaluate, in the long term, the maintenance of oral health indices in patients who had undergone head and neck radiation therapy, in association with vitamin E (case-control group). METHODS: An observational study was conducted to evaluate, in the long term, the oro-dental characteristics of patients undergoing head and neck radiotherapy, in association with vitamin E. This study is the forth stage of work which started in April 2013. It includes an oro-dental assessment in 41 months. 17 patients with cancer (4 f., and 13 m.), aged between 48 and 72, were selected, then divided into a case group (7 patient) which received products containing vitamin E, and a control group which didn't receive products containing vitamin E. Each patient was informed about the protocol approved by the ethical Committee of our Institution . They sign an informed consent and have been evaluated by a single dental hygienist. During each visit (T0, T1, T2) the patients received a questionnaire, then the dental hygienist performed an extra-oral examination, an intra-oral examination, a detection of oral health indices through the use of a plaque index and a bleeding index (Ainamo & Bay 1975), motivation and home oral hygiene education, professional cleaning. Professional cleaning was performed using an ultrasonic scaler above and below the gum, soft non-abrasive cups, prophylaxis paste (RDA <40). RESULTS: To manage the side effects a good oral health is necessary, which can be reached by a perfect plaque control (patient compliance). The effectiveness of our protocol of study is evident, as both indices (plaque and bleeding) were significantly reduced from T0 to T11. Plaque index average: T0: 79%, T11: 5%. Bleeding index average: T0: 69%, T11: 3%. The vitamin E reduced pain and burning sensation. CONCLUSIONS: Patients who undergone radio-therapy, are special needs patient. The role of a dental hygienist is essential in following up oral hygiene and food habits, in short, medium and long term. Also vitamin E, can give a good relief from pain and burning sensation (although more clinical evaluation need to be done).