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of inflammation occurring around at least 1 micro-implant was 1.22 (95% CI, 0.34–4.38) in the study to control group, but the result was not statistically significant (p = 0.758). Mean pain levels amounted 7.8  $\pm$  0.65 mm in study vs. 8.5  $\pm$  0.75 mm in control group and were not significantly different (p > 0.05). Procalcitonin and CRP levels were not elevated in subjects with clinically evident inflammation (p > 0.05).

**Conclusions:** Antibiotic prophylaxis does not reduce the incidence of peri-implantitis and does not alleviate postoperative pain. Inflammation of micro-implant surrounding soft tissues is not reflected by serum PCT and CRP levels.

#### FC96

### Clinical Efficacy of Autologous Bone Grafts and Xenogenous Bone Materials

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Aim or Purpose: The purpose of this study was to compare the efficacy of surgical interventions to replace jaw defects with the use of different types of bone grafts based on objective clinical and radiological criteria.

**Materials and Methods:** The study included 90 patients with postoperative jaws defects. They underwent reconstructive operation and creating conditions for further prosthetic rehabilitation. The patients were divided into 3 randomized groups, depending on the surgical treatment used: group I – xenogeneic bone substitutes were used, group II – autologous corticocancellous bone grafts from the iliac crest and in group III autograft combined with *PRGF*. Patients' status was assessed in the early (up to 1 month) and long-term postoperative period (more than 6 months).

**Results:** In the study series, xenogeneic materials showed the highest volumetric stability in the remote postoperative period ( $19.9 \pm 8.1\%$  versus  $45.6 \pm 21.84\%$  for bone autografts). However, autologous grafts demonstrated better integration and quality of bone tissue. There were no significant differences in frequency of postoperative complications or the possibility of implant placement in the study groups.

**Conclusions:** The use of PRGF in combination with autograft accelerated the regeneration of soft tissues, but it does not affect significantly the incidence of infection complications and volume loss of the bone grafts.

Free Communication Session 25 | 09.07.2019, 11:30–12:30 | Cubicle 2

Themes: Oral Pathology/Oral Immunology

#### FC097

#### Nano Sea Cucumber's Extract for Oral Squamous Cell Carcinoma Apoptosis

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Aim or Purpose: One of the types of cancer is oral squamous cell carcinoma (OSCC), which is the least studied and lack of early detection and became a serious problem in the field of oral health in Indonesia as a country that has a high number of active and passive smokers. The genus Stichopus has a great efficacy as an anti-cancer. A combination of amino acids that can help synthesize of the antioxidant Glutathione can definitely reduce oxidant activity which occurs cancer. The purpose was to determine the effect of nano golden sea cucumber (Stichopus hermanni) extract in oral squamous cell carcinoma (OSCC) apoptosis.

**Materials and Methods:** In this research, using experimental design, there were twenty five of Rattus norvegicus strain wistar, 90–110 grams weight that were divided into five treatment groups, i.e. untreated rats, rats with induction of Dimethylbenz 7,12-  $\alpha$ An-thracene (DMBA) solution, rats with treatment dose 0.33 g/kg Weight, 0.66 g/kg Weight and 0.99 g/kg Weight.

**Results:** The result of this research was the appearance of buccal epithelial cells of the Rattus norvegicus showed apoptosis from immunohistochemical staining. There was a maximum increasing of apoptosis in the treatment with a dose of 0.66 g/kg Weight known from statistics analysis, One-way Anova.

**Conclusions:** The induction of golden sea cucumber (Stichopus hermanni) extracts to a treatment group affect the oral squamous cell carcinoma apoptosis.

#### FC098

## Histological Analysis of Epithelial tissue in Dental Follicles of Impacted Teeth

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Aim or Purpose: With the aim of studying the epithelial lining and epithelial rests characteristics of dental follicles and its relationship with age, sex and anatomical site 190 biopsies were studied.

**Materials and Methods:** Universe: 190 specimens. Selection criteria: The following radiographic features were considered. Teeth with 2/ 3 or more of their anatomical development and crowns immersed in the bone tissue. -No image abnormality. Samples were fixed in 10% formalin and processed by paraffin inclusion technique. Sections measuring 4–6 microns were stained with Hematoxylin & Eosin, PAS. Histological variables: Lining epithelium was classified as follows: - without epithelial lining. -simple epithelium. - stratified epithelium. -respiratory epithelium. More than one Epithelial rest were classified as follows: -many. - epithelial rests in two or more fields. -few. - Epithelial rests in a single field. -without. - No epithelial rests in any field. The data were analyzed with the Chi-square statistic. The results with dependence between the variables were analyzed with a linear test to adjust the model.

**Results:** The distribution of small islands or cords of odontogenic epithelial rests in the dental follicle evidence a statistical dependence with anatomical site (p < 0.05). The Lining epithelium show