ISSN 0327- 9545
ISSN 1667-5746 (online version)

Abstracts from the

IV JOINT MEETING OF THE BIOLOGY SOCIETIES OF ARGENTINA

(Cuarta Reunión Conjunta de Sociedades de Biología de la República Argentina)

XXXVII Annual Scientific Meeting of the Tucumán Biology Association
XXIII Annual Scientific Meeting of the Córdoba Biology Society
XXXVIII Annual Scientific Meeting of the Cuyo Biology Society
Argentine Biology Society
Rosario Biology Society
Chilean Society of Reproduction and Development

September 9–15, 2020
Online edition

The abstracts have been revised and evaluated by a Scientific Committee prior to publication

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immediately below the oolemma, and the area outside the zona pellucida was more stained with PNA in the coculture group ($P < 0.0001$; Kruskal-Wallis and Dunn's multiple comparison test). The coculture system significantly increased monospermic fertilization rates ($P = 0.03$; Fisher's test), the IVF efficiency ($P = 0.02$; Fisher's test) and blastocysts rates ($P = 0.04$; Fisher's test). This simple coculture system could replace the conventional maturation medium with gonadotropins, with a more efficient CR, lower rates of polyspermy and greater embryo development.

CLINICAL MEDICINE AND ODONTOLOGY

A81
STANDARDIZATION IN THE MEASUREMENT OF POST EXTRACTION ALVEOLAR CRESTS WITH LOCALIZED VOLUMETRIC TOMOGRAPHY

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Cone-Beam Volumetric Tomography (CBVT) allows to analyze images of cranium facial complex in three dimensions, allowing in this case, to measure and compare alveolar dimensional changes altered by reabsorption processes after an extraction, which makes difficult, over time, a conventional or implant supported prosthetic rehabilitation. The objective of this work was to design a standardized technique using, us references, fixed anatomical repairs for the measurement of vestibular, palatal, or lingual alveolar ridges after an extraction. A total of 17 patients with precise indications were selected, preparing a removable surgical thermoformed plate, prior to surgery, us alveolar protector against masticatory impacts, placing it to the experimental group (11 patients), socket with collagen, and the control group (6 patients), socket without collagen, for one month. CBVT was indicated for both groups, one immediately after surgery and the other after three months, allowing to compare the dimensional changes through their measurements and, thus, obtaining the rates of reabsorption. The results of the treated patients, the statistical averages obtained, using fixed anatomical repairs us references through which the corresponding traces are made, showed that the control group obtained less bone resorption than the experimental group, both in height and width, demonstrating that the use of the plate in the socket without collagen would be more effective as a preventive of the dimensional bone resorption; concluding that the standardized technique turned out to be effective for the measurement of alveolar contours, since there is no scientific evidence of measurements made in 3D images with immovable fixed points.
Key words: Conebeam, Bone resorption, Thermoformed plate.

A82
STRESS AND DIETARY HABITS DURING QUARANTINE IN THE CONTEXT OF COVID-19 PANDEMIC

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The global Covid 19 pandemic, leads to quarantine, and is a stressor that would affect the subjects at different levels and intensity. An important aspect is the impact of the emotions on dietary habits health. The objective of this work was to investigate the stress and dietary habits in adult subjects during quarantine period forced to stay indoors due to COVID-19 pandemic. Surveys were made for its on-line answer and then they were analyzed. 85 total adult participants both sex, 87.9% women and 12.1% men. We determined that 90.3% spent with its relatives all this times, 9.7% was alone. Relation to changes in dietary habits, 60.2% consider that there is a relationship between current personal situation and their eating behavior. Respect to appetite during quarantine times: 70% refer to changes, 60% increased appetite and 7.1% decreased or absence of appetite. In addition, were reported changes in the organization, quality, and quantity of food 77.5% while 1.2% keeping same. About the increase in the consumption of certain foods or beverages, we observed that 71.8% increased the flour consumption, 34% refined sugars, 22.4% fats and oils, 12.9% soft drinks and 5.9% increased the consumption of alcohol. However, 45.9% increased the consumption of fruits and vegetables, 21.2% dairy products and 35.3% meat. The 61.2% changed feeding schedules. Relation to changes in body weight, 61.2% reported an increase and 45.2% do simple daily physical exercises. 80.7% report a relationship between their habits, daily routine, and diet during quarantine and 60% report sleep disturbances. Regarding to stress, 11.8% reported calmness, 83.9% expressed negative emotions and uncertainly about the future, and 68.8% have difficulties of organizing its life in these quarantine times. Our results indicated that COVID-19 pandemic led to stress conditions that could cause a dramatic change in the dietary habits, which could lead to an increase in body weight and sleep disturbances. In the future, this analysis should be carried out again to determine that the normality has returned, after the long period of quarantine and the different times flexibilities in our region.

A83
HISTOLOGICAL STUDY OF HUMAN DENTAL ALVEOLS TREATED WITH XENO-GRAFT IN IMPLANTOLOGY

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Dental implants are the treatment to replace missing teeth. The success of this therapy is achieved if the existing bone is sufficient to surround and stabilize the implant. While, when it is not, the application of a bone graft or substitute is essential. The most widely used is the autograft or autologous bone due to its biocompatibility. However, the market offers other variants, such as bovine bone xenografts that are used in daily practice.

The objective of this study was to evaluate 3 bovine xenografts (BIOSS, TIOSS and SYNERGY) applied to alveoli after human extraction during prosthetic rehabilitation with implants. Bone tissue samples were treated with: Group 1, TIOSS; Group 2, BIOSS; Group 3, Synergy; Group 4, without substitute (clot). Histopathological studies were carried out. The interpretation of bone biopsies was made following ISO Standards 10993-6 Year 2007: A- Biocompatibility: inflammation, foreign body reaction (FBR), abscesses, necrosis, fibrosis, macrophages. B- Bone neoformation: type of bone, presence/absence of particles and rate of resorption. Histometric and statistical studies. The histological results obtained at 4 months were: (A) Biocompatibility: Group 1 – TIOSS: moderate chronic inflammation. Presence of FBR, abundant lymphocytes. Group 2 and 3 – BIOSS and Synergy similar behavior with a few chronic inflammation and absence of FBR. Group 4 (clot) – absence of FBR. None of the cases presented necrosis and/or abscesses. (B Bone neoformation: Group 1 – TIOSS: amorphous particles surrounded by numerous congestive vessels and predominantly lax connective tissue and newly composed bone (38%). Group 2 and 3 – BIOSS and Synergy: particles surrounded by fibrovascularized tissue and newly composed bone (47% BIOSS and 49% Synergy) with abundant fatty bone marrow. Group 4 (clot) – laminar bone type (45%). New bone percentages did not show statistically significant differences ($P = 0.2$). The reabsorption rate of the particles was low in the 3 substitutes evaluated by their persistence at 4 months post placement in the alveolus. From the results obtained, we conclude that BIOSS and Synergy had better biological behavior due to the absence of FBR. All three stimulated bone neoformation. The low reabsorption rate prevented alveolar bone atrophy after extraction and maintained the dimensions of the receptor zone; beneficial events for the stability of the implant and its osseo integration.
Key words: Bovine xenografts, Alveoli, Bone regeneration.

A84
OPTICAL, POLARIZED, METALLOGRAPHIC AND ELECTRON SCANNING MICROSCOPIES FROM OSTEOFORMATION BY POLYLACTIC-POLYGLYCOLIC ACID

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Tooth extraction is one of the most common dental procedures. This situation is followed by irreversible alveolar bone resorption during the first three months of healing, although dimensional changes can be observed up to a year later. The clinical consequences limit the availability of bone for implant placement. Among the existing therapeutics, bone graft materials (BGM) are the choice, since in addition to providing structural support, they promote osteopromotion. In the present study, Polylactic-Polyglycolic Acid (PLA-PGA) particles were characterized and biological behavior as BGM in dental alveoli was evaluated. The in vivo model used was the post extraction alveolus in Wistar rats. Animals were divided into 2 groups: 1) Control Group (CG): without MRO; 2), Experimental Group (EG): with PLA-PGA. Bone samples were evaluated with soft X-rays (SXR), histological with light microscopy (LM) and polarized light (PL), histometric (H) and statistics studies at weeks 1, 2, and 3 after surgery. The characterization was carried out with a metallographic optical microscope (MOM) and a Scanning Electron (SEM). Results: MOM: particle conglomerates composed of small grains. Average size: 18 ± 6 µm. SEM: particle conglomerates with an ampfractuous and irregular surface, with wide interconnected channels limited by discontinuous and porous walls. In vivo model: SXR: CG: varied radiopacity areas, random, without reaching the apex of the alveolar ridges. EG: low radiopacity images (PLA-PGA particles) surrounded by more radiopaque areas (newly formed bone). LM: GC: alveolus covered by lamellar bone EG: alveolus covered by fibrous connective tissue, PLA-PGA particles surrounded by lamellar bone and primitive bone marrow. PL: in two thirds dense fibrous connective tissue birefringent reddish orange and in the apical third areas of reddish newly formed bone (type I collagen), with some yellowish green areas (type III collagen). GE: superficial third, birefringent dense fibrous connective tissue of intense reddish and orange colors (type I collagen), middle and apical third trabeculae of laminar neoformed bone, red orange and yellow birefringent (type III collagen), with persistence of PLA- particles PGA surrounded by a loose, reddish-orange fibrous area. EH: Bone volume in the GC was 75.12% and GE 78.26% at 3 weeks without statistically significant differences ($P = 0.35$). PLA-PGA was biocompatible and behaved as an osteoconductor and osseostimulator since it promoted the formation of type I and III collagen and bone neoformation around its particles. The alveolar space was preserved. Key words: bone regeneration, alveolus, PLA-PGA.

A85
HUMAN PREMOLARS: STUDY OF OCCLUSAL PITS INJECTED WITH DYE AND THEIR RELATIONSHIP WITH DENTINAL STRUCTURES

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The occlusal face of the premolars is formed by fusion of embryological lobes and where the union is missing, the occlusal pits appear. These are superficial excavations of the enamel that ecological niches to trap bacterial plaque and food debris. They cross enamel and its deep part ends close to the dentin, a permeable tissue. Enamel and dentin are separated by a limit crossed by dentinal structures: canaliculi, spindles and Linderer plumes. These teeth can get caries, a multifactorial disease whose anatomical factor could be enhanced if we verify that the dye injected into the occlusal pits passes into dentin and its structures. Our objectives: histologically classification of enamel located around terminal part of occlusal pits; form that the terminal takes; infiltration of dye into dentin and its structures. Descriptive-relational analysis, comparison between and within groups, Mann–Whitney test/5% bilateral test. We included healthy premolars, both sexes, extracted for orthodontic reasons at IUNIR, public and private dental centers. The roots were immobilized in molds and their crowns were left emerging, the dye was injected under pressure and allowed to dry. The crowns were devastated by their free faces until their proximity to the occlusal pits, the remnants were cut, and these were subjected to the technique of wear. The transparent sheets were examined at higher magnification with OM. Total, 30 teeth, 15 upper premolars (PMS) and 15 lower premolars (PMI). The PMS group was represented by 33% male and 67% female, mean age 15 ± 7.6; in PMI were 53% and 47%, average of 18 ± 9. The enamel surrounding the terminal of the occlusal pits there was classified in irregular: PMS 67%; in PMI 80% ($P = 0.35$), with fissures 40% and 33% respectively ($P = 0.99$), fissured-bonded to dentinal structures 13% in PMS and 53% in inferiors ($P = 0.0068$). The terminal shape on: narrow 34% in