



Several endocrinological abnormalities such as hypothyroidism have been implicated in recurrent pregnancy loss. In our laboratory, we have shown that hypothyroidism is associated with a lower number of pups per litter with no alteration in ovulation rate. Angiogenesis is a critical process in the uterine endometrium in preparation for embryo implantation, maintenance of early pregnancy, and development of the placenta. During this period steroid hormones (estradiol and progesterone) stimulate the synthesis of vascular endothelial growth factor (VEGF-A), the main modulator of angiogenesis during peri-implantation period. The aim of this work was to study the effect of hypothyroidism on the degree of vascularization and proliferation of the uterine decidua during the implantation process. Hypothyroidism was induced in female Wistar rats bred in our laboratory by daily administration of 6-propyl-2-thiouracil (PTU 0.1 g/L in drinking water). On day seven of gestation PCNA expression and uterine vascularization were evaluated by immunofluorescence and PCNA and VEGF-A by western blot. Our results demonstrate that hypothyroidism decreases vascularization of the uterine tissue and proliferation (PCNA) of the endothelial and decidual cells during the process of implantation of the embryo. The decrease in PCNA was corroborated by western blot, as well as a significantly decreased in VEGF expression. In conclusion, hypothyroidism affects the vascularization and proliferation of the endometrium during the implantation process in gestation. The decrease in VEGF-A due to hypothyroidism may be responsible for the alteration in uterine tissue vascularization.

ÁREA: CLÍNICA HUMANA Y ODONTOLOGÍA

107 MECHANICAL ALTERATIONS OF DENTAL ENAMEL PRODUCED BY A FLAVORED DRINK. *In vitro*.

Abal A, Tanevitch A, Perez P, Llompart G, Durso G. Instituto de Investigaciones en Educación Superior (IIES) Facultad de Odontología UNLP Argentina. drpanacea2003@yahoo.com

There is extensive information on the effect of non-alcoholic soft drinks on tooth enamel. Flavored mineral waters are frequently consumed by children although their action on the adamantine microstructure in deciduous teeth is scarcely characterized. The objectives of the work were to determine the acidity of a flavored water and to study the mechanical modifications of the microstructure of the enamel of deciduous teeth. Exfoliated teeth were obtained, with proper informed consent. The crowns were included in acrylic resin and were abrasioned in a longitudinal plane. A mineral water of citrus flavor was selected and its acidity was determined with a colorimetric scale. The samples were immersed for 10 minutes in 50 ml of the beverage and nano-indentation surface hardness registers were obtained before and after treatment. The pH of the flavored water was 2. The action of the beverage produced a reduction of the surface hardness, resulting in an average value of 1.91 ± 0.7 GPa, in the radial enamel and 2.01 ± 0.6 in the enamel with bands. The percentage of reduction of the nano-hardness in the radial enamel was 28% and in the enamel with bands of 34%. The contact depth increased 125.48 nm in the radial enamel and 119.33 nm in the banded enamel. The beverage used contains citric acid which acts as a chelator on the hydroxyapatite causing demineralization. We conclude that organic acids produce softening of the microstructure of dental enamel

108 STUDY OF THE RELATIONSHIP BETWEEN VISUAL ACUITY AND THE PRESENCE OF SYMPTOMS IN CHILDREN OF 2ND GRADE OF THE CITY OF SAN LUIS

Bañuelos A, Cano C, García Montaña F, Martínez F, Arellano N, Sarmiento G, Farrero C. MinCyT. Gob. de la Prov. de San Luis, Fac. de Cs Médicas. Universidad Católica de Cuyo. San Luis. alicia.bañuelo@gmail.com

Undiagnosed visual disabilities are a main cause of school failure. Early detection of visual problems is of paramount importance since timely treatment allows correcting these defects and preventing their progression. The aim of this studied was to study the relationship between visual acuity (VA) deficit and the presence of some symptoms or signs. We evaluated 340 children between 7-8 years belonging to the second degree of public and private schools in the city of San Luis. The VA was assessed using the Snellen optotype (normal value ≥ 0.7) and the presence of symptoms or