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Omega 3 essential fatty acids (n3) are involved in reproductive physiology and early development of mammals. Objective: to assess reproductive success (RS), evolution of gestation, fetal and placental development of Albino swiss mice, fed with different n6/n3 ratios.
Females (n= 65) with vaginal plug (gestational day 0.5=GD0.5), were assigned to three groups: control (C, commercial diet, n=23), S and SF (C with 10% of soybean and sunflower oils, respectively, n=21). Body weight (BW) was measured daily: . At GD12.5 we meadured RS, number of corpora lutea (NCL), embryos and resorbed embryos; weight of uteri (UW), fetus-placental units (FPU), placentas and embryos; in vivo fertilization rate (IVFR). Histology of gravid uteri was analyzed by hematoxylin-eosin staining. Statistic: Chi-square; ANOVA and Kruskal Wallis, ($p \leq 0.05$). Significant decrease of RS was detected in S and SF (29%) vs C (48%). In pregnant females (n=4 for each treatment): no significant differences in UW, NCL, total and resorbed embryos or IVFR. Significant gain in the weights was observed in SI compared to C and SF, respect to the following: FPU (0.61±0.03 vs 0.26±0.02 and 0.25±0.02g), placentas (0.10±0.005 vs 0.09±0.003 and 0.09±0.004g) and embryos (0.23±0.03 vs 0.11±0.02 and 0.14±0.03g). Histology: cells with vesiculous nuclei and prominent nucleoli and cytoplasmic vacuoles were observed in deciduous of all groups, particularly in S. Such cells showed pink hyaline cytoplasmic globules, strongly stained with eosin in S and SF. Cells of cytotrophoblast and syncytiotrophoblast were observed in the labyrinth. Embryonic development was more advanced in S, manifested by the presence of cartilage, tubular structures, glandular tissue with abundant blood vessels, loose connective tissue, developing hair follicles and pseudostratified epithelium. Reduced RS in S and SF could be attributed to linoleic acid excess, which increases PGF2alfa, associated to luteolytic effect. The more beneficial n6/n3 ratio of soybean oil would allow greater embryonic development, evidenced by weight gain and the presence of histological structures.
Supported by: SECyT-UNC, CICyT-UNLaR.
Key words: poliunsaturated fatty acids; reproduction; early development; placenta.

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EFECTO SOBRE LOS NIVELES DE FIBRINÓGENO PLASMÁTICOS EN MIGRAÑA EXPERIMENTAL

SADDI T N, BAEZ M, BUONANOTTE F, BUONANOTTE C, TARÁN M, SCRIBANO-PARADA M, BLENCIO S, MOYA M Y BALCEDA A.
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En migraña, los procesos que promueven los cambios oxidativos e inflamatorios vasculares sistémicos tendrían un importante papel en el mantenimiento del status crónico de la misma. La elevación persistente de marcadores inflamatorios y de estrés oxidativo en sangre periférica en sujetos migrañosos ha dirigido el interés de numerosas investigaciones en torno a dilucidar los mecanismos involucrados que incrementan esos marcadores, tanto en modelos animales como in vitro, teniendo como eje experimental la vía trigéminovascular.
El objetivo fue analizar en ratas los efectos de la capsaicina, un activador trigeminal, sobre los niveles plasmáticos de fibrinógeno, un indicador de riesgo cardiocerebrovas-

cular independiente con respecto a los factores de riesgo convencionales involucrado en procesos oxidativos y aterogénicos.
Se utilizaron 24 ratas machos Wistar en 2 grupos de 12: Control (A) y Activación trigeminal (B) con capsaicina.
La activación trigeminal se realizó bajo anestesia mediante 3 inyecciones en total de capsaicina 1 mM cada una con un intervalo de 72 hs entre ellas en aferencias trigeminales temporomandibulares. Los animales se sacrificaron 24 hs después de la última inyección. Fibrinógeno (mg/dl) se cuantificó por espectrofotometría según la técnica de Ratnoff y Menzic. Los resultados se analizaron con la prueba de Shapiro-Wilks modificado y el análisis de la varianza (ANOVA). Se estableció una $p<0.05$ para todos los casos. En (B), el fibrinógeno aumentó significativamente (253 ± 12mg/dl) vs. el control (A) (193 ± 7 mg/dl) ($p<0.05$).
En migraña experimental, las inyecciones temporomandibulares repetidas de capsaicina producirían un aumento significativo de la concentración plasmática de fibrinógeno con respecto al control.

Palabras clave: activación trigeminal, capsaicina, fibrinógeno.

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EFFECT ON FIBRINOGEN PLASMA LEVELS IN EXPERIMENTAL MIGRAINE

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Processes promoting oxidative and inflammatory vascular systemic changes would have an important role in the maintenance of chronic migraine. Persistently high levels of inflammatory and oxidative stress markers in peripheral blood in patients with migraine leads attention to elucidate the mechanisms involved in elevation of these markers, specially focusing research in the trigeminovascular pathway. The objective was to analyze the effects of capsaicin in rats. Capsaicin is trigeminal activator that increases plasma levels of fibrinogen, a useful indicator of stroke risk independent of the conventional risk factors involved in oxidative and atherogenic processes. Twelve normal male Wistar rats were used as control group, while in another group (B, n=12) trigeminal activation was achieved with capsaicin. administered under anesthesia into the temporomandibular joint afferent, 3 injections of 1 mM capsaicin each every 72 h. The animals were sacrificed 24 hours after the last injection. Fibrinogen (mg/dl) was measured by spectrophotometry according to Ratnoff and Menzic technique. The results were analyzed with Shapiro-Wilks modified test and ANOVA. Lefel of significance: $p <0.05$. Fibrinogen increased significantly (253 ± 12mg/dl) in B compared to the control group (193 ± 7 mg / dl); $p<0.05$). Conclusion: in experimental migraine, several temporomandibular injections of capsaicin produce a significant increase in the concentration of fibrinogen in plasma with respect to control.

Key words: trigeminal activation, capsaicin, fibrinogen.