

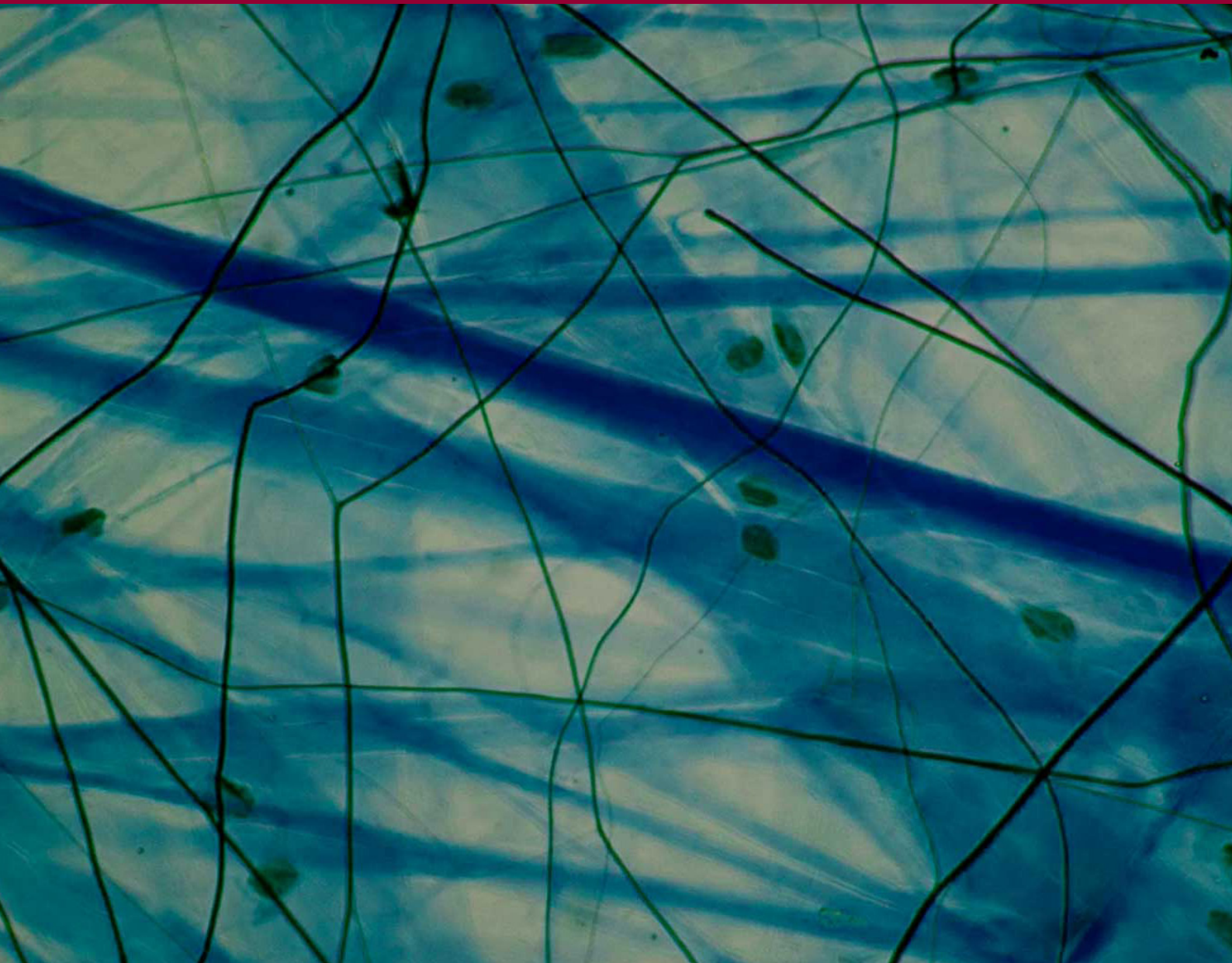
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LIBRO DE RESÚMENES



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intestinal mRNA expression levels of proinflammatory cytokine IL-1 β (+212%, P<0.05) respect to C. Interestingly, VitC not only reverted MS parameters studied and improved the intestinal redox unbalance, but also normalized the increased intestinal IL-1 β mRNA levels, generated by fructose. Our study suggests that inflammation and OS, perhaps this one with a key role, could be important mediators of Mrp2 down-regulation under MS-like conditions, and that VitC could be a potential therapeutic tool to prevent intestinal barrier impairment by counteracting the effect of such mediators.

G4. Levels of salivary immunoglobulin A in edentulous subjects

Juárez RP, Serrano CP. Physiology Department. Facultad de Odontología. FaCENA. UNNE.

Salivary immunoglobulin A, in its secretory form (s-IgA), is the main antibody class in saliva and provides the first line of defense against pathogens. Association of dental caries and gingival inflammation with s-IgA has been studied in children and young adults, but information on s-IgA in healthy edentulous older people is very limited. Multiple studies have failed to demonstrate the utility of s-IgA as a non-invasive biomarker of mucosal immunity in oral cavity. The aim of this study was to determine the changes in salivary s-IgA levels of adults with varying degrees of tooth loss. In this observational analytical cross-sectional study, unstimulated saliva samples were collected by spitting method without swallowing from 66 adults (age 18-88 years), 22 dentulous and 44 edentulous. The edentulous patients were divided into two groups with different number of tooth lost (22 partially edentulous and 22 totally edentulous). Salivary s-IgA levels were determined using immunoturbidimetry. Experiments were carried out in triplicate and the results analyzed using Student's t-test and Anova. Among edentulous patients, significantly higher s-IgA levels were concomitant with tooth loss. Level of s-IgA was highest in the group of totally edentulous patients (p<0.01). There were not significant differences between dentulous subjects and partially edentulous patients. These results reveal an increase in s-IgA levels in edentulous patients with conventional plate denture. Further research is needed to investigate s-IgA levels among edentulous patients with different types of prosthetic restorations in order to aid in the prediction and management of oral manifestations.

G5. Bibliometric analysis of scientific production on saliva in PubMed and Dentistry & Oral Sciences Source during the period 2000-2018.

Juárez, RP. R&D Group: Saliva as a Diagnostic Fluid. FOUNNE.

Saliva has many functions which are needed for proper protection and functioning of the human body. Bibliometrics studies related to dentistry is uncommon in the literature. Salivary flow reductions can negatively affect the oral health and quality of life of patients. From this perspective, the aim of this study was to map the scientific landscape related to saliva research worldwide between 2000 and 2018. This study adopted a bibliometric method. An observational, descriptive, retrospective investigation was carried out, with quantitative and qualitative description of the data, through the analysis of documents. PubMed (PM) and Dentistry & Oral Sciences

Source (DOSS) have been selected as important online bibliometric databases for searching and retrieving documents, in order to display the structural and dynamic aspects, and the evolution of saliva scientific research. In PM, 34327 documents were registered, with 21% of publications in dental journals. The most discussed topics were related to chemistry, metabolism and salivary biomarkers. In DOSS, 6621 documents were registered, with 51% of publications in 25 journals. Dental caries and saliva analysis were the most studied topics. During the study period, international research on saliva was increased, indicating the importance of saliva as an oral health problem. However, the scope of multicenter studies was lower than expected, given the enormous burden of global health problems related to saliva. Further bibliometric studies are needed to analyze the scientific literature related to saliva as diagnostic fluid.

G6. 5-lipoxygenase (5-LOX) inhibition by zileuton reduces the amount of neutrophils that reaches the liver during liver regeneration after partial hepatectomy (PH)

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5-LOX is the first and main enzyme that participates in the synthesis of leukotrienes. LTB4 is a leukotriene involved in inflammation and also is a potent chemoattractant of neutrophils. Previous studies from our lab showed that treatment with a 5-LOX inhibitor produces a decrease in hepatic LTB4 content and a reduction in liver proliferation after 70% PH in rats, indicating that LTB4 is necessary for liver regeneration. Additionally, it was reported that liver regeneration was impaired after neutrophils depletion. Objective: To study if the reduction in hepatic LTB4 reduces the levels of polymorphonuclear leukocytes (PMNs) post-PH which could be necessary to trigger liver regeneration at early times after PH. Methods and results: Adult male Wistar rats were subjected to sham surgery or PH (70 % liver removal). Two hours before surgery, animals received a specific inhibitor of 5-LOX, zileuton (Zi) 40 mg/kg BW or the drug vehicle. Liver samples were obtained at 3 and 5h post-PH. We studied by immunohistochemistry and qRT-PCR the myeloperoxidase (MPO) levels (marker of neutrophils) and we found a significant increment in the levels of MPO-positive cells in the hepatectomized animals treated with vehicle (control PH) respect to the sham (+300%*). On the other hand, the animals that received the 5-LOX inhibitor showed a decrease in MPO-positive cells (-62,5%# 5h post-PH) and MPO mRNA levels (-38,48%# 3h post-PH) respect to control PH rats. Also, by immunofluorescence and confocal microscopy we analyzed a specific marker of rat neutrophil leukocytes (using anti-neutrophil antibody LS C348005, LSBio) and we observed a significant reduction in the number of positive cells in PH rats treated with Zi compared with control PH rats at 3h post-PH (-36,6%#) (*p<0,05 vs. sham, # p<0,05 vs. control PH). Conclusion: Inhibition of 5-LOX by zileuton reduces the levels of LTB4 that attract PMNs cells into the liver. This phenomenon can mediate the inhibitory effect of 5-LOX inhibition on liver regeneration post PH.