



Tipo	Periódico
Título	Tissue content of metalloproteinase-9 and collagen in the colon with and without fecal stream after intervention with infliximab in rats subjected to Hartmann's surgery
Autores	Alves Junior AJT, Pereira JA, Ávila MG, Domingues FA, Sato DT, Martinez CAR.
Autor (es) USF	José Aires Pereira, Mariana Grandi de Ávila, Fernanda Aparecida Domingues, Carlos Augusto Real Martinez
Autores Internacionais	
Programa/Curso (s)	Programa de Pós-Graduação Stricto Sensu em Ciências da Saúde
DOI	10.1590/ACB360401
Assunto (palavras chaves)	Colitis; Volatile Fatty Acids; Tumor Necrosis Factor-alpha; Collagen; Matrix Metalloproteinase 9; Rats; Free Oxygen Radicals
Idioma	Inglês
Fonte	Título do periódico: Acta Cirurgica Brasileira ISSN: 0102-8650 Versão on-line ISSN: 1678-2674 Volume/Número/Paginação/Ano: 36, 360401, 2021
Data da publicação	14/05/2021
Formato da produção	Impressa
Resumo	<p>Purpose Quantify the tissue content of metalloproteinase-9 (MMP-9) and collagen in colic mucosa with and without intestinal transit after infliximab administration in rats subjected to Hartmann's surgery. Methods Twenty-two rats underwent colon diversion by Hartmann's surgery. Animals were maintained with intestinal bypass for 12 weeks to induce development of diversion colitis (DC). Afterwards, animals were divided into three groups: first group received subcutaneous application of saline solution (SS) 0.9%, while the remaining two groups received infliximab subcutaneously at doses of 5 or 10 mg·kg⁻¹·week⁻¹ for five consecutive weeks. After the intervention, animals were sacrificed, removing the segments with and without intestinal transit. Diversion colitis was diagnosed by histological study, and its intensity was determined by a validated inflammatory scale. Tissue expression of MMP-9 was assessed by immunohistochemistry, while total collagen was assessed by histochemistry. Tissue content of both was measured by computerized morphometry. Results Colon segments without intestinal transit had a higher degree of inflammation, which improved in animals treated with infliximab. Collagen content was always lower in those without intestinal transit. There was an increase in the collagen content in the colon without transit in animals treated with infliximab, primarily at a dose of 10 mg·kg⁻¹·week⁻¹. There was an increase in the content of MMP-9 in the colon without fecal transit, and a reduction was observed in animals treated with infliximab, regardless of the dose used. Conclusions Application of infliximab reduces inflammation, increases the total collagen content and decreases the content of MMP-9 in the colon without intestinal transit.</p>
Fomento	CNPq: Processo No. 303837/2018-7