

intragrupais, variando de 75% a 100%, enquanto as intergrupais demonstraram taxas reduzidas, entre 16% e 35%. O Split-Tree corroborou essas descobertas, evidenciando clados e uma notável afinidade genética entre *A. aphophilus* e *A. segnis* em comparação com *A. actinomycetecomitans*. A análise do Mauve identificou mudanças estruturais, como inversões e translocações, indicando dinâmica evolutiva. **Discussão:** As avaliações do Gegenees e SplitsTree demonstraram heterogeneidade gênica, porém com níveis consideráveis de similaridade interespecies. A notável proximidade entre *A. aphophilus* e *A. segnis*, em contraste com *A. actinomycetecomitans*, sugere uma afinidade genética mais estreita. As análises do Mauve reforçam essa dinâmica, destacando semelhanças evolutivas entre clados e sublinhagens. A presença de mutações estruturais, como inversões e translocações, reforça a dinâmica evolutiva e a baixa sintonia gênica. **Conclusão:** A aplicação de ferramentas bioinformáticas permitiu uma análise pangenômica das espécies de *Aggregatibacter*, evidenciando semelhanças intra e interespecies. Essas descobertas oferecem perspectivas valiosas para compreender as relações entre essas bactérias e os genes compartilhados. Ademais, esse estudo possui implicações relevantes na área da saúde, considerando que as *Aggregatibacter* spp. são patógenos humanos. A proximidade genética identificada sugere a possibilidade de investigações futuras para alvos terapêuticos e vacinais abrangentes para todo o gênero.

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HCAP18: A PROMISING SCREENING METHOD FOR PATIENTS WITH CHRONIC NEUTROPENIA?

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Aims: To evaluate the expression of neutrophilic cathelicidin pro-LL-37 (hCAP18) and the expression of CAMP gene in patients with chronic primary neutropenia (CPN), and its correlation with the etiology of the disease. **Methods:** Prospective study, carried out from 2021 to 2023, including children and adult patients treated at a neutropenia reference service. We analyzed 4 patients with severe congenital neutropenia (SCN), 2 with cyclic neutropenia (CN), 3 with autoimmune neutropenia (AIN), 3 with chronic idiopathic neutropenia (CIN) and 2 patients with glycogen storage disease 1B (DDG1B). The hCAP18 protein expression was evaluated in the plasma of patients with different types of neutropenia and healthy control individuals, using the Western-Blot technique. The CAMP gene expression assay was performed using the real-time PCR (qPCR) technique, using RNA extracted from whole blood. **Results:** The expression of hCAP18 was not observed in patients with SCN, even after increasing the neutrophil count using filgrastim. In individuals with CN, the expression of hCAP18 was also not observed during the neutropenic phase, but the protein was detected in the phase of

normalization of the neutrophil count, showing a positive correlation of the protein expression with the number of neutrophils in this etiology, different from that of SCN. Expression of hCAP18 was also detected in patients with AIN, CIN and DDG1B, despite pronounced neutropenia in some patients, and in the control group. The qPCR showed a low expression of CAMP in patients with SCN, while the other etiologies showed variations in gene expression, being positive in some individuals and negative in others with the same etiology. However, using this method, it was possible to notice a positive correlation ($r=0.732$ and $p < 0.05$ – Spearman test) between the expression of the CAMP gene and the expression of hCAP18. **Discussion:** hCAP18, encoded by the CAMP gene, is an important component of the secondary granules of neutrophils, with immunological and bactericidal activity. The results of this work corroborate the data by Karlsson et al., who showed absence or significant decrease in the expression of hCAP18 in individuals with SCN and its expression in individuals with CIN and AIN. In addition, we also demonstrated a positive correlation between the expression of the CAMP gene and hCAP18 and a decrease in the expression of the CAMP gene in patients with SCN. Therefore, plasma hCAP18 assessment is suggested as a differential CPN screening method, aiding in the diagnosis of SCN due to low or undetectable hCAP18 levels. **Conclusion:** There is a correlation between CAMP gene expression and hCAP18 expression with CPN. In addition, we also demonstrated that hCAP18 is not expressed in patients with SCN and in the neutropenic phase of CN. Thus, the use of this technique is suggested as a new screening routine for the investigation of patients with CPN, especially in patients with SCN and CN, differentiating them from the others and avoiding more invasive tests.

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CORRELAÇÃO ENTRE BIOMARCADORES INFLAMATÓRIOS E A FUNÇÃO RENAL DE PACIENTES TRANSPLANTADOS

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Introdução e objetivo: O monitoramento de pacientes transplantados renais inclui a realização de vários exames capazes de avaliar a função renal, as possíveis complicações pós-transplante e os desfechos clínicos. O objetivo do presente estudo foi correlacionar dois potenciais biomarcadores da resposta inflamatória (CXCL10 e MCP-1) aos desfechos encontrados em pacientes transplantados renais. **Materiais e métodos:** Foram avaliados 54 pacientes transplantados renais provenientes do Ambulatório Bias Fortes do HC-UFMG entre os anos de 2016 e 2021. As dosagens dos marcadores CXCL10 e MCP-1 foram realizadas por ELISA in-house, utilizando-se um kit comercial Peprotech™ (Cranbury, NJ, USA). Os