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**Przebieg procesu zapalnego u pacjentów po zabiegu bariatrycznym na podstawie
analizy poziomu wybranych cytokin**

Rozprawa na stopień doktora nauk medycznych i nauk o zdrowiu

Promotor:

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SUMMARY

Laparoscopic sleeve gastrectomy (LSG) is one of the most commonly performed bariatric procedures, leading to significant weight loss and metabolic improvement. The efficacy of LSG extends beyond weight reduction, encompassing beneficial immunological and anti-inflammatory effects. Key mediators in these processes include cytokines such as interleukin-6 (IL-6) and interleukin-10 (IL-10), which play a pivotal role in the regulation of pro- and anti-inflammatory pathways.

This study analyzed changes in IL-6 and IL-10 levels at 3 and 12 months post-LSG, revealing a dynamic pattern of cytokine modulation. At 3 months, IL-6 levels increased, potentially reflecting a transient inflammatory response associated with rapid weight loss. However, by 12 months, IL-6 levels significantly decreased, while IL-10 concentrations increased, suggesting a progressive resolution of chronic inflammation and restoration of immunological homeostasis.

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Furthermore, the analysis demonstrated a strong correlation between waist circumference reduction and metabolic success after LSG. Waist circumference emerged as a superior predictor of positive metabolic outcomes compared to BMI, highlighting its clinical relevance in assessing postoperative success. These findings underscore the importance of a multidimensional approach to evaluate bariatric outcomes, integrating both anthropometric and immunological parameters to refine treatment strategies for obesity management.

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