

中文題目：十二指腸黏膜表面再製針對非酒精性脂肪肝病的代謝影響：系統性回顧和統合分析

英文題目：The Metabolic Influence of Duodenal Mucosal Resurfacing for Nonalcoholic Fatty Liver Disease: A Systematic Review and Meta-analysis

作者：莊得榮<sup>1</sup>，許斯淵<sup>2</sup>，柯忠旺<sup>2</sup>

服務單位：<sup>1</sup>台中榮民總醫院內科部，<sup>2</sup>台中榮民總醫院肝膽腸胃科

**Background:** Nonalcoholic fatty liver disease (NAFLD) or nonalcoholic steatohepatitis (NASH) is a leading cause of chronic liver disease worldwide with decreased life expectancy. Duodenal mucosal resurfacing (DMR) has been associated with metabolic improvement in glycemic and hepatic parameters of type 2 diabetes, but the metabolic impact of DMR for NAFLD/NASH remains inconclusive. We conducted a meta-analysis to investigate metabolic effects of DMR in patients with NAFLD/NASH.

**Method:** Three major bibliographic databases were reviewed for enrollment of trials prior to January 28, 2022. We included adults with biopsy-proven NAFLD/NASH or liver magnetic resonance imaging proton density fat fraction (MRI-PDFF) > 5% at baseline and focused on the metabolic difference of MRI-PDFF at 12 weeks, and HbA1c or homeostatic model assessment index for insulin resistance (HOMA-IR) at 24 weeks.

**Results:** Two studies involved a total of 67 participants for analysis. When compared with pre-intervention status, mean difference of MRI-PDFF, HbA1c, and HOMA-IR after DMR were -2.22 (95% CI: -12.79~8.34), -0.32% (95% CI: -0.80~0.16), and 0.15 (95% CI: -5.11~5.41) without statistical significance.

**Conclusion:** For patients with NAFLD/NASH, DMR has the trend to improve liver fat at 12 weeks, and HbA1c level at 24 weeks except HOMA-IR based on a very low quality of evidence.