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Introduction

Roux-en-Y gastric bypass (RYGB) is a widely adopted surgical intervention for obesity [1], offering significant weight loss and metabolic benefits. Beyond its primary effects on weight reduction, RYGB induces profound anatomical and physiological changes in the gastrointestinal tract, particularly the gastric portion. These alterations have sparked interest in their potential implications for gastric health, including the development of premalignant conditions such as intestinal metaplasia and dysplasia. Obesity is a known risk factor for various cancers, including gastric cancer, prompting concerns about the long-term effects of RYGB on gastric cancer risk in obese patients [2-6]. The anatomical rearrangement and altered gastric physiology post-RYGB may influence the gastric environment in ways that could either mitigate or exacerbate premalignant conditions. Understanding these dynamics is crucial for optimizing patient care and long-term outcomes following RYGB. This introduction provides a framework for evaluating the potential impact of RYGB on the premalignant status of

optimize gastric health and cancer prevention in this population should be a priority in clinical practice [10]. In conclusion, our study provides evidence that RYGB may contribute to the exclusion or reduction of potential premalignant conditions in the gastric portion of obese women. These findings support the broader implications of bariatric surgery in reducing cancer risk and improving long-term health outcomes in obese patients. Further research is warranted to elucidate the underlying mechanisms and optimize management strategies to maximize the benefits of RYGB in gastric cancer prevention.

Conclusion

Roux-en-Y gastric bypass (RYGB) emerges as a promising intervention not only for achieving significant weight loss and metabolic improvements but also for potentially reducing the risk of premalignant conditions in the gastric portion of obese women. Our study provides compelling evidence that RYGB leads to a reduction in intestinal metaplasia and dysplasia, indicative of a favorable impact on gastric cancer risk. The anatomical changes and altered gastric physiology post-RYGB play pivotal roles in these observed benefits. By creating a smaller gastric pouch and bypassing a portion of the gastrointestinal tract, RYGB modifies the gastric environment in ways that may inhibit the development or progression of premalignant lesions. Additionally, the metabolic improvements associated with substantial weight loss post-surgery contribute to reducing systemic inflammation and insulin resistance, further mitigating cancer-promoting conditions. However, while our findings are promising, continued long-term surveillance is imperative. Regular monitoring through endoscopic examinations and histopathological assessments remains crucial to detect any potential recurrence or new developments of premalignant conditions. This underscores the importance of comprehensive, multidisciplinary care in managing patients who have undergone RYGB. In conclusion, RYGB represents a significant advancement in the field of bariatric surgery, not only for its metabolic benefits but also for its potential role in reducing the risk of gastric cancer in obese individuals. Future research should focus on elucidating the underlying mechanisms of these effects and refining strategies to optimize long-term outcomes and cancer prevention strategies following RYGB. By doing so, healthcare providers can continue to improve patient care and outcomes in this population.

Acknowledgement

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Conflict of Interest

None

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