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Can the foregut and hindgut theories have a synergistic effect?

Commentary to manuscript:
"Metabolic surgery and beta cell regeneration in type-1 diabetes: a novel hypothesis"

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I commend the authors for their innovative concept of combining Metabolic Surgery with Stem Cell Transplantation in order to treat Type 1 Diabetes Mellitus. The hypothesis of this treatment modality is based on creating a more physiologic environment for transplanted adult stem cells to engraft and better function by allowing patients to loose weight and decrease insulin resistance and insulin levels by means of a metabolic procedure such as the gastric bypass. The authors contend that in addition to the above-mentioned benefits, this procedure will bypass the duodenum and proximal jejunum enhancing incretins and anti-incretin effects1. I would add to this hypothesis the potential effects and benefits of rapid emptying and transit time seen in patients undergoing gastric bypass. The latter will deliver undigested food to the ileum stimulating the L-Cells to the release of GLP1 and other gut hormones that might in turn not only further decrease insulin resistance but act as a growth factor enabling the transplanted stem cells to engraft better, differentiate and function1. I very much look forward to the results of future clinical trials.

Conflict of Interests:

The Authors declare that they have no conflict of interests.

References

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