



Reduction in abdominal visceral fat after gastric bypass surgery in obesity patients with diabetes

Hongkai. Gao

Department of General Surgery, 3rd Medical Center, Chinese PLA General Hospital, Beijing, China

Abstract:

Obesity and its complications, such as diabetes, have become a major health problem. Existing treatment options for obesity are very limited and tend to be associated with disappointing sustainable effects. Gastric bypass surgery is considered to be the most effective treatment option for weight reduction in obese patients with type 2 diabetes (T2DM). To evaluate reduction in abdominal visceral fat, 52 T2DM patients with obesity were recruited to measure the distribution of fat mass by Tanita Body Composition Analyzer and abdominal fat mass by Quantitative CT (QCT). The remission rate of T2DM and obesity were 86.5% (45/52) and 67.3% (35/52) respectively. BMI and fat mass decreased significantly after surgery, while free fat mass remain stable. Moreover, total visceral fat volume (TVFV) contributed more fat loss, accompanied by the decline of total abdominal fat volume (TAFV), than total subcutaneous fat volume (TSFV). Then, TSFV declined obviously only at 12 months after RYGB. Conclusion: LRYGB can cause reduction of abdominal visceral fat, while QCT could assist bariatric surgeon to evaluate distribution of abdominal visceral fat accurately.

Biography

Hongkai Gao, M.D. is Associate Professor of Surgery and Vice chief of General Surgery at Department of General Surgery, 3rd Medical Center, Chinese PLA General Hospital in Beijing. He served as Director of Beijing Diabetes Prevention Association. His research interests include studying the surgical mechanisms on diabetes and obesity and the role of gastrointestinal hormones in the physiology and pathophysiology of glucose homeostasis. Dr. Gao authored the book, "You should know about the gastric bypass before the surgery" and "Bariatric and metabolic surgery" in addition to many scientific and public policy articles.



Publication of speakers:

1. Zhang Z, Smischney NJ, Zhang H, Van Poucke S, Tsigotis P, Rello J, et al. AME evidence series 001—the Society for Translational Medicine: clinical practice guidelines for diagnosis and early identification of sepsis in the hospital. *J Thorac Dis.* 2016;8:2654–2665. doi: 10.21037/jtd.2016.08.03. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
2. Umbrello M, Formenti P, Bolgiaghi L, Chiumello D. Current concepts of ARDS: a narrative review. *Int J Mol Sci.* 2016;18:64. doi: 10.3390/ijms18010064. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
3. Rousseau A-F, Losser M-R, Ichai C, Berger MM. ESPEN endorsed recommendations: nutritional therapy in major burns. *Clin Nutr.* 2013;32:497–502. doi: 10.1016/j.clnu.2013.02.012. [PubMed] [CrossRef] [Google Scholar]

Webinar on Women Health Science and Care, 7 September, 2020, Tokyo, Japan

Citation: Dr. Hongkai Gao, Department of General Surgery, 3rd Medical Center, Chinese PLA General Hospital, Beijing, China, Webinar on Women Health Science and Care, 7 September, 2020, Tokyo, Japan