



# A systematic review of drug absorption following bariatric surgery and its theoretical implications.

Padwal R<sup>1</sup>, Brocks D, Sharma AM.

## + Author information

### Abstract

Demand for bariatric surgery has risen exponentially and bariatric patients often have multiple indications for post-operative pharmacotherapy. The purpose of this study was to systematically review the published literature examining the effect of bariatric surgery on drug absorption. Studies were sought through searches of MEDLINE, EMBASE, the Cochrane Controlled Trials Registry and hand searches of reference lists. Two reviewers independently assessed studies for inclusion. Twenty-six studies (15 case reports/case series evaluating 12 different agents and 11 non-randomized controlled studies examining 15 different agents) were found. Evidence for diminished drug absorption was found in 15/22 studies involving jejunoileal bypass, 1/3 studies of gastric bypass/gastroplasty and 0/1 studies examining biliopancreatic diversion. The effect of bariatric surgery on drug absorption appears drug-specific. Drugs that are intrinsically poorly absorbed, highly lipophilic and/or undergo enterohepatic recirculation exhibited the greatest potential for malabsorption. The most consistent evidence for diminished absorption was found for cyclosporine, thyroxine, phenytoin and rifampin. Reduced drug absorption may occur post-bariatric surgery and this effect appears drug-specific. Individual dose-adjustment and therapeutic monitoring may be required. Rigorously conducted controlled studies are needed to evaluate the effect of modern bariatric procedures on drug absorption.

PMID: 19493300 DOI: [10.1111/j.1467-789X.2009.00614.x](https://doi.org/10.1111/j.1467-789X.2009.00614.x)

[Indexed for MEDLINE]



Publication types, MeSH terms, Substance 

LinkOut - more resources 

