GALLSTONE FORMATION FOLLOWING LAPAROSCOPIC ILEAL INTERPOSITION

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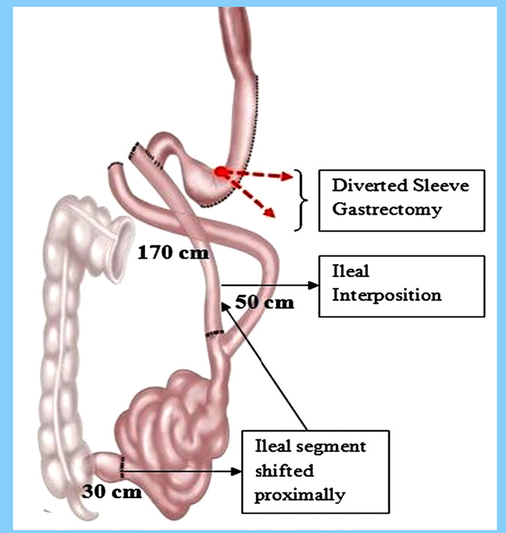
INTRODUCTION & AIM: Aim : The purpose of this study was to evaluate the incidence of gallstone formation after undergoing Ileal Interposition for type-2 diabetes, and to assess whether it is necessary to perform concomitant cholecystectomy, to prevent major problems caused due to gallstone formation.

MATERIALS & METHODS: A retrospective study was done among patients with type 2 diabetes who underwent Ileal Interposition with BMI adjusted Sleeve Gastrectomy (IISG) between February 2008 and December 2019. Postoperatively, patients were prescribed ursodeoxycholic acid (UDCA) 300mg twice daily for 6 months. The patients were then grouped into two : group A (those who developed gallstones or sludge) and group B (those who did not). The time at which patients developed gallstones was noted.

Population: 236 patients	Pre-Operative	Post-Operative
Previous Cholecystectomy:	14 (5.93 %)	
Diagnosis of Gallstones:	9 (3.81%)	16 (8.74 %)
Lost to Follow-up:	7 (2.97 %)	
Included in Study: 206	144 underwent Diverted Duodenal Ileal Interposition	62 had the non-diverted Jejunal II
Incidence of stones:	10.42 % (15/144) with Diverted	4.84 % (3/62) - in Non-Diverted
Timing of formation:	27.78 % in 1st year	72.22 % (13 / 18)
Mean Time of Development:		3.64 years after surgery
Period of formation:	5.56 % in 0-3 months & 3-6 months	16.67 % between 6-12 months



Duodenal (Diverted) Ileal Interposition

CONCLUSION: Prophylactic use of UDCA for the first 6 months should be implemented to reduce the incidence of gall stone formation after metabolic surgery. Concomitant cholecystectomy should be reserved in cases with preoperative evidence of gallstones.

Mechanisms: Reduced oral intake, diversion of food (reduces cholecystokinin, causing bile stasis & supersaturated bile to form cholesterol crystals) and rapid weight loss (increased bile calcium &mucin); weight loss more than 25% was the major risk factor for gallstone formation.