

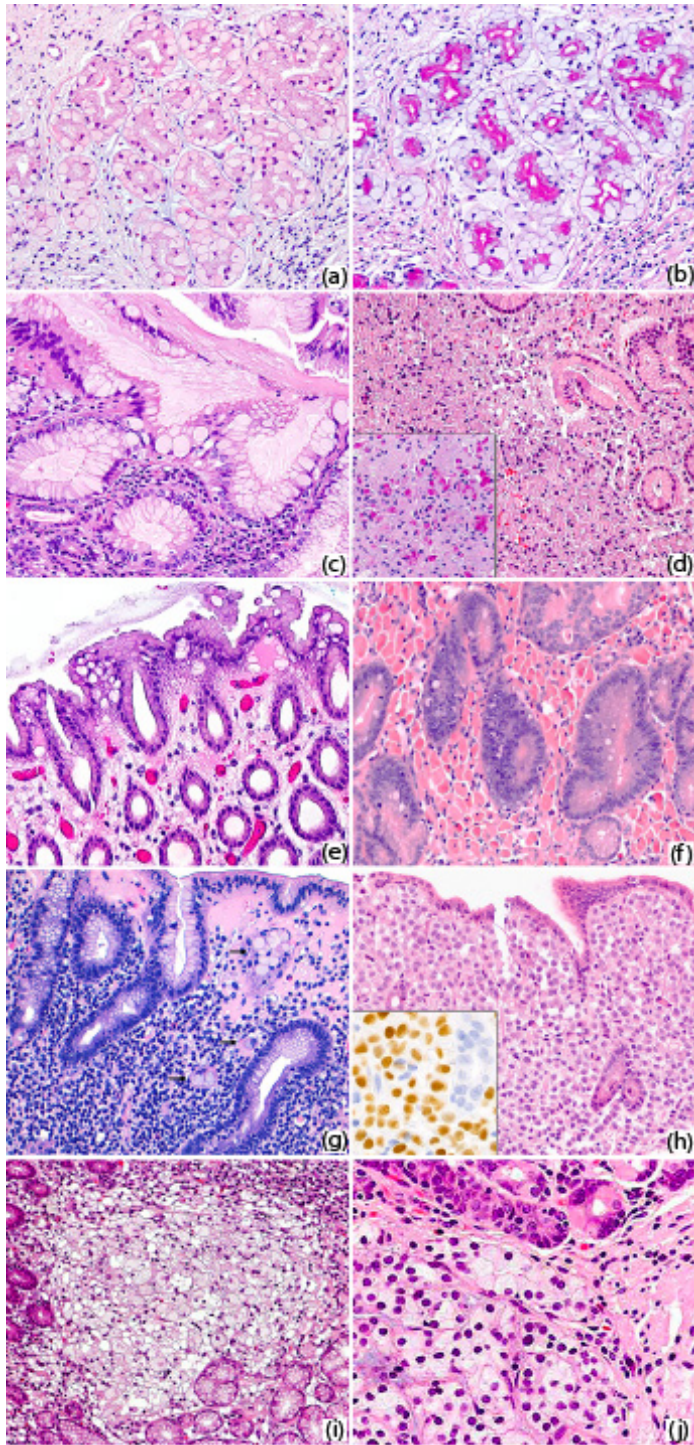
## Supplementary Text 2: Surgery and recovery

Reconstruction of the GI tract is usually performed with a Roux Y diversion of the pancreaticobiliary contents 40-50 cm downstream from the esophageal anastomosis to avoid chronic bile reflux. The length of the Roux limb can be made longer for morbidly obese patients to facilitate optimal postoperative weight loss. Mesenteric defects should be closed to minimise the incidence of internal bowel herniation. The use of non-absorbable sutures is recommended, although formal evidence to support this is not yet available. Other surgical details, such as positioning the Roux limb relative to the colonic mesentery, the use of a jejunal pouch, and the technique of the esophagojejunal anastomosis should be left to the clinical discretion of the operating surgeon. On rare occasions, if access to the duodenum is required for endoscopic surveillance, a retrocolic isoperistaltic jejunal interposition may be used. Although somewhat controversial and often subject to individual surgeon preference, the practice of routinely inserting decompressing naso-enteric tubes and/or jejunostomy feeding tubes is not generally supported by prospective randomised clinical trials.

Adequate opioid-limiting pain control is the bedrock of uncomplicated recovery, enabling adequate pulmonary recruitment, and early ambulation. Oral intake can generally begin on the first postoperative day and advance as the patient and clinician judge appropriate. Contrast upper GI series are not mandatory prior to initiation of oral intake, but should be performed if there is clinical suspicion of an anastomotic leak. Other potential early complications should be aggressively screened for, recognised, and managed early, to minimise their impact on recovery.

There appears to be slightly increased risk of subsequent cholelithiasis in patients who have undergone gastrectomy compared to a case matched non-gastrectomy control population.<sup>18</sup> Among several series with relatively short follow-up, the absolute risk of cholelithiasis after gastrectomy is estimated at around 3.5-12%, with the risk of symptomatic cholecystitis estimated to be one quarter to one third that population. The incidence of post-gastrectomy cholelithiasis appears to be consistently higher after total compared to subtotal gastrectomy.<sup>19-21</sup> One underpowered trial of prophylactic cholecystectomy at the time of gastrectomy concluded that one would need to perform more than 32 prophylactic cholecystectomies to prevent one episode of symptomatic cholecystitis.<sup>22</sup> At present, the data are not strong enough to support a recommendation for routine prophylactic cholecystectomy at the time of prophylactic total gastrectomy.

A word about the impact of serious postoperative complications unique to the setting of elective prophylactic surgery is appropriate. The incidence of these complications, how they are managed, and the ultimate outcome affect not only the patient sustaining the complication, but also impact the decision making of other family members contemplating similar surgery.



**Supplementary Fig. 2. Mimickers and pitfalls of HDGC.** (a) Glassy cell change (HE) and (b) PAS-D staining: the glassy vacuole is negative, while the luminal portion of the cytoplasm is positive. (c) Globoid change of foveolar epithelium. (d) Artfactual pseudo-SRCs induced by procedural trauma; inset (PAS-D staining) shows scattered positive mucopeptic cells. (e) Vacuolisation of superficial epithelium, with globoid change and tufting of foveolar cells. (f) Russel bodies gastritis. (g) Isolated and clustered pseudo-SRCs (arrows) in the context of chronic gastritis. (h) Metastatic lobular breast cancer; inset shows immunoreactivity for estrogen receptor. (i) Xanthomatous cells. (j) Neuroendocrine tumour.