Introduction: Esophagus, Stomach, and Duodenum

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This section presents the ambitious field of open and laparoscopic surgery in benign and malignant diseases of the esophagus, stomach, and duodenum.

Attempts to treat esophageal cancer surgically emerged at the beginning of the twentieth century. Torek successfully resected the thoracic esophagus in 1913, but real progress came as a result of the development of thoracic surgery during and after the Second World War. The concept of extensive lymph node resection in combination with en bloc esophagectomy was proposed by Logan in 1963 but with considerable morbidity and mortality.

Surgical procedures, pre- and postoperative management and treatment, and prognosis after surgical treatment have improved considerably in the past three decades. Expertise of the surgeon and the institution, patient selection, choice and radicality of operation, and pre- and postoperative care are the most important parameters for outcome.

For this reason, the first eight chapters present a comprehensive survey of the different open and laparoscopic surgical procedures, indications, and choice of operation in esophageal cancer. They give clear guidelines as to how and when to operate with regard to the biological characteristics of the tumor. The focus then turns to benign esophageal diseases such as diverticula, strictures, and achalasia.

The following chapters address the techniques of subtotal, total gastric resections in benign and malignant diseases, respectively. Four chapters then outline the open and laparoscopic strategies in the case of palliation such as gastroenterostomy and gastrostomy. Next the laparoscopic procedure is described as the gold standard for gastroesophageal reflux, and then the open approach is covered followed by different laparoscopic techniques for hiatal repair in paraesophageal hernia. Another chapter comprehensively covers the available strategies for morbid obesity, and the last chapter in the section deals with the ambitious pancreas-sparing duodenectomy.

The section has been prepared by experts in their surgical fields, and we hope that it will provide the reader with a comprehensive overview of current surgical standards for the various procedures.