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(a) (b) (c) (d) Figure 9.6 The classic appearance of gastric antral vascular ectasia, which is often treated with argon plasma coagulation. Figure 9.5 A gastric ulcer with active bleeding (a) is initially treated with adrenaline injection to achieve haemostasis (b) . Two haemoclips are then applied to prevent rebleeding (c and d) .

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These may have a role in some patients but are yet to demonstrate benefit over surgical fundoplication. Endoscopic bariatric therapies, such as intragastric bal loons, sleeve gastroplasty and duodenal resurfacing, may all provide alternatives to more established surgical options. In contrast, there is clear evidence that the insertion of a percu taneous endoscopic gastr ostomy (PEG) tube enhances nutri - tional and functional outcome in patients unable to maintain oral nutritional intake (Figure 9.8). PEG insertion is often a - prelude to treatment of complex orofacial malignancy and y be used to support nutrition in patients with alternative ma malignant, degenerative or inflammatory diseases. - The deployment of self-expanding metal stents with or without a co vering sheath inserted over a sti ff guidewire leads to a significant improvement in symptomatic dysphagia and quality of life in patients with malignant oesophageal and gastric outlet obstruction (Figure 9.9) . Covered stents are the mainstay of treatment for benign or malignant tracheo - oesophageal fistulae. It is now possible to endoscopically manage early oesoph - - ageal and gastric neoplasia with endoscopic m ucosal resec - tion (EMR) or endoscopic submucosal dissection (ESD). These techniques require specialist training but have allowed -

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Figure 9.8 A schematic diagram of percutaneous endoscopic gastrostomy insertion. A standard endos

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Figure 9.10 Novel upper gastrointestinal therapeutic uses of oesoph agogastroduodenoscopy include the use of endoscopic mucosal resection to remove early gastric cancer leaving a clean base.

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