Appendix

Graphical illustrations of ECDS and ERCP

**ERCP**

ERCP involves placing a metal stent into an obstructed bile duct through an endoscope. Since the obstruction is caused by pancreatic malignancy, the stent is placed across the tumour. The whole process is assisted by an X-ray and injection of a contrast medium.

**ECDS**

ECDS directly creates a connection between the bile duct and the duodenum by a metal stent through the endoscope under the guidance of ultrasound, for biliary drainage. The stent is placed above the tumour rather than across it.