



IHH Healthcare

# Endoscopic Retrograde Cholangio-Pancreatography (ERCP)

## KEY PROCEDURE HIGHLIGHTS

1

Combine upper gastrointestinal (GI) endoscopy and x-rays to **examine and treat conditions of the bile and pancreatic ducts.**

2

**Commonly used to remove bile duct stones and treat obstructive jaundice** caused by bile duct strictures.<sup>1</sup>

3

**Less invasive** option compared with open surgery.<sup>5</sup>



## WHAT IS ENDOSCOPIC RETROGRADE CHOLANGIO-PANCREATOGRAPHY (ERCP)?

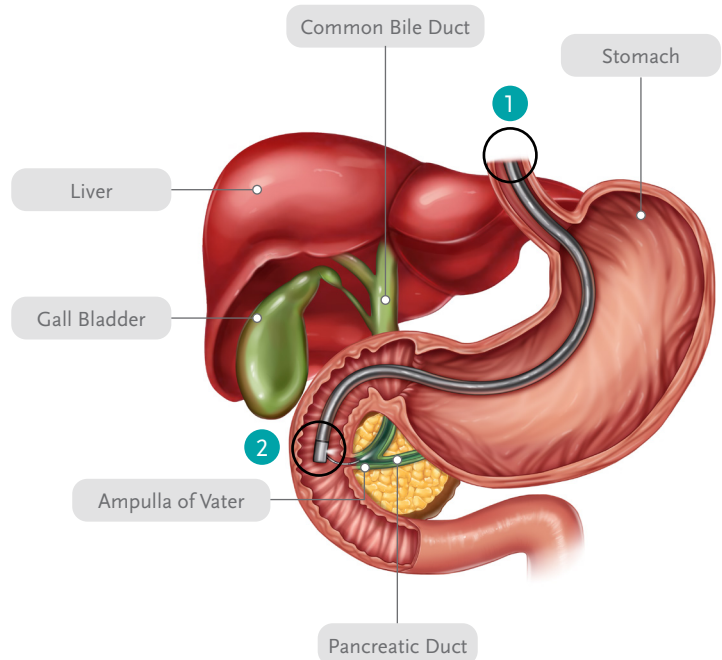
ERCP is a procedure to examine, diagnose and treat conditions of the pancreas or bile ducts.

### HOW IT WORKS

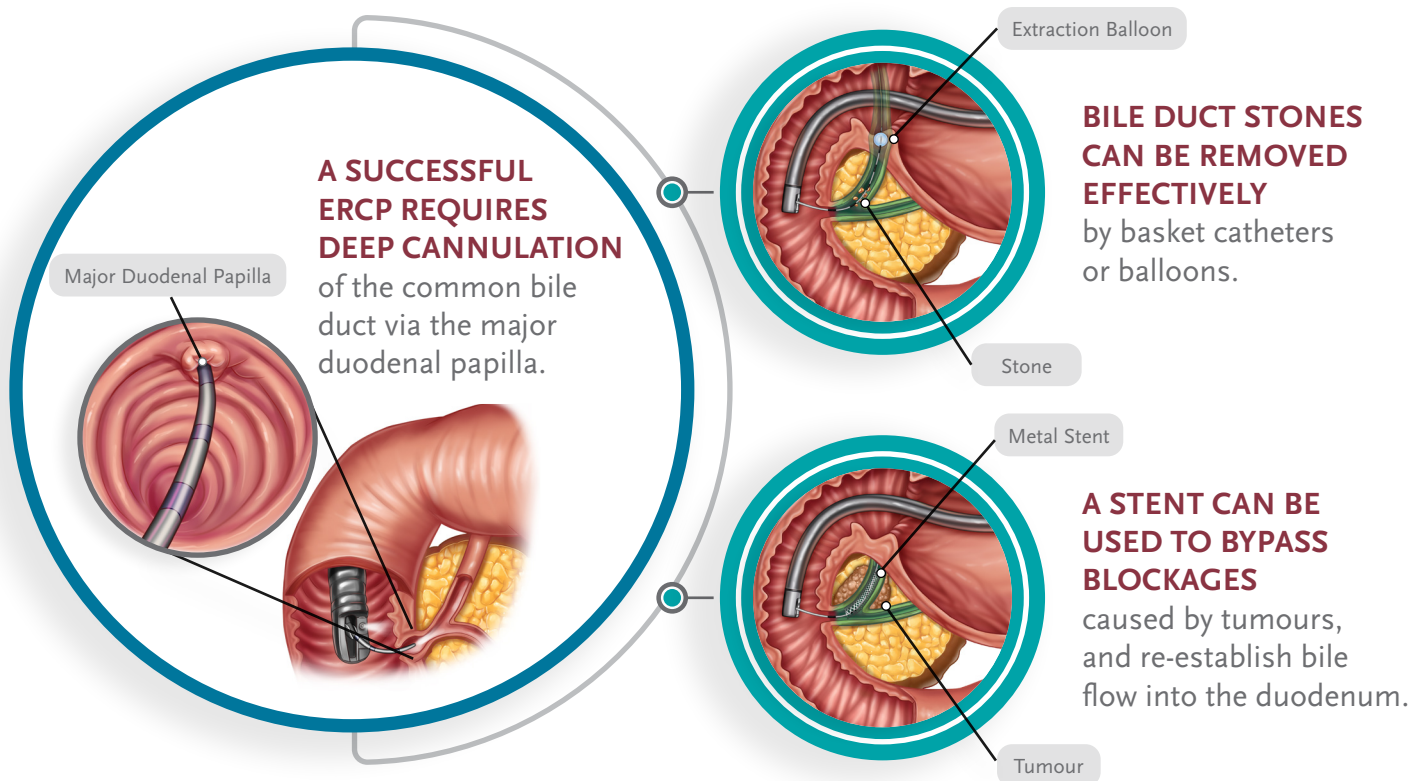
**1** A bendable, lit tube (endoscope) is placed through the mouth, into the stomach and first part of the small intestine (duodenum).

**2** In the duodenum, a small plastic tube (cannula) is passed through the endoscope and into a small opening (ampulla).

Dye (contrast material) is injected and X-rays are taken to study the ducts of the pancreas and liver.<sup>2</sup>



## UNDERSTANDING KEY PERFORMANCE MEASURES OF ERCP



## CLINICAL STATISTICS USED BY PARKWAY SPECIALISTS

Only gastroenterologists who undergo sub-specialization in advanced endoscopy, specifically in the field of ERCP are certified and accredited to perform ERCP in Parkway Hospitals Singapore. Our gastroenterologists meet the ESGE guidelines and strive to exceed these performance measures.

### ERCP CLINICAL STATISTICS



**>90%<sup>4</sup>**

#### Rate of Bile Duct Cannulation

A poor bile duct cannulation rate is associated with:



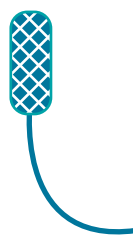
Delay in definitive therapy

Increased risk of adverse events



Increased costs

Inconvenience due to repeated examinations or alternative therapies



**>95%<sup>4</sup>**

#### Rate of Stent Placement

Problems associated with unsuccessful stent placement are:



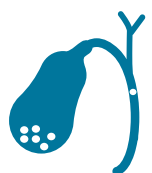
Stent moving out of place

Blockage formation in stent



Infection

Inflamed pancreas



**>90%<sup>4</sup>**

#### Clearance Rate of Bile Duct Stones

Incomplete stone extraction:



Increases risk of cholangitis

Incurs further health care costs and potential hospitalization



**AS LOW AS 3.5%<sup>7</sup>**  
Rate of Post-ERCP Pancreatitis

Post-ERCP pancreatitis is potentially life-threatening. Some risk factors for PEP include:



Inadequate/ lack of training of operator

Patient gender and history of PEP or Pancreatitis<sup>6</sup>



## THERAPEUTIC TREATMENTS OF ERCP



### Removal of Bile Duct Stones

ERCP can be used with a gallbladder surgery to fully remove bile duct stones.



### Stent Placement for Bile Duct Obstruction

Bile duct tumours can be diagnosed and stents can be placed to bypass blockages of the bile duct. This helps to relieve jaundice before a surgery and drain bile for advanced cancer where surgery cannot be performed.



### Sphincterotomy

This involves making a small incision in the opening of the pancreatic duct or the bile duct, which can help small gallstones, bile, and pancreatic juice to drain appropriately.



### Treatment of Pancreatic Diseases<sup>2</sup>

#### Pancreatic Duct Stones

ERCP provides direct access to the pancreatic duct to remove pancreatic duct stones.

#### Pancreatic Duct Leaks

Pancreatic duct leaks can often be treated with endoscopic placement of transpapillary stents in a manner similar to the use of biliary stents for closing bile duct leaks.

#### Pseudocysts

Endoscopic drainage and management of the pseudocyst is a less invasive alternative to surgical treatment.

## REFERENCES

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## LENGTH OF STAY

**1 - 2 Days**  
in a standard ward



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