

Current “ Off the Job Training ” of Pediatric Minimally invasive surgery

Simulators



Neonatal abdominal cavity

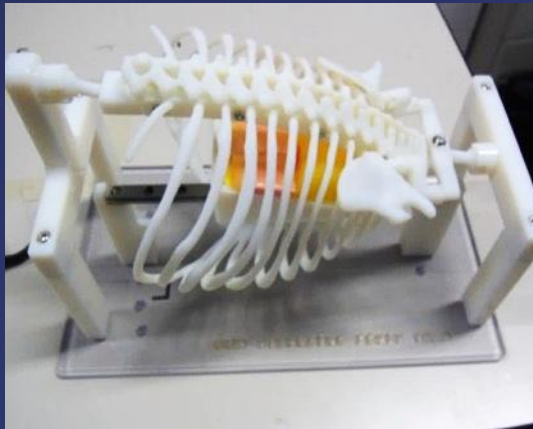


Neonatal thoracic cavity

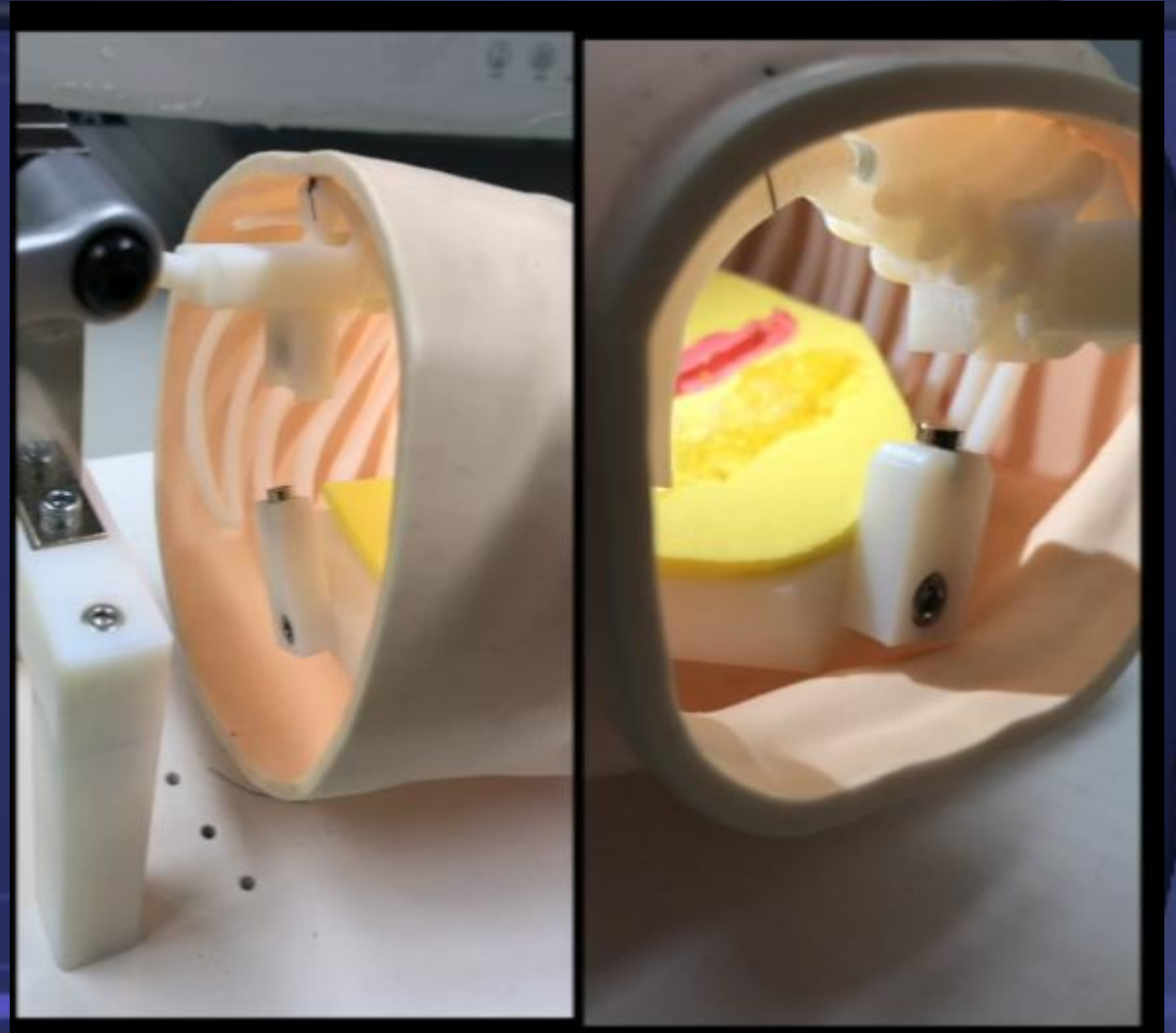
Simulator of Esophageal atresia



Esophageal model

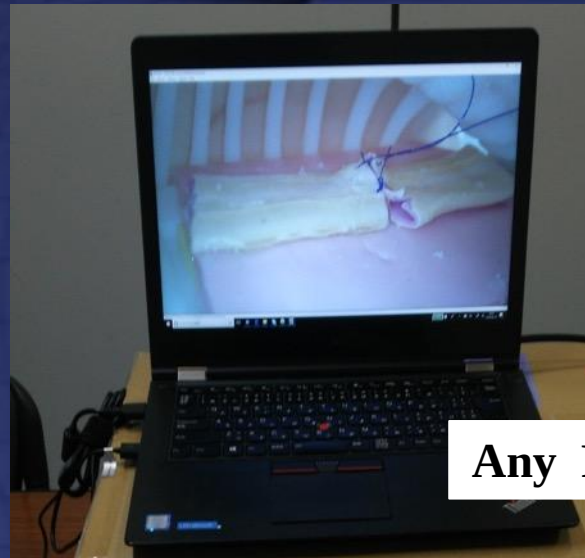


Neonatal thoracic model



Easy to set

Neonatal surgical Simulators

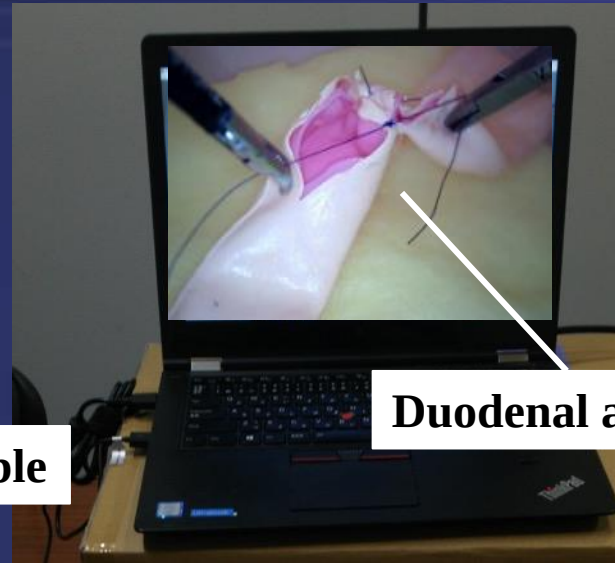


Any PC available



Thoracic model

Esophageal atresia



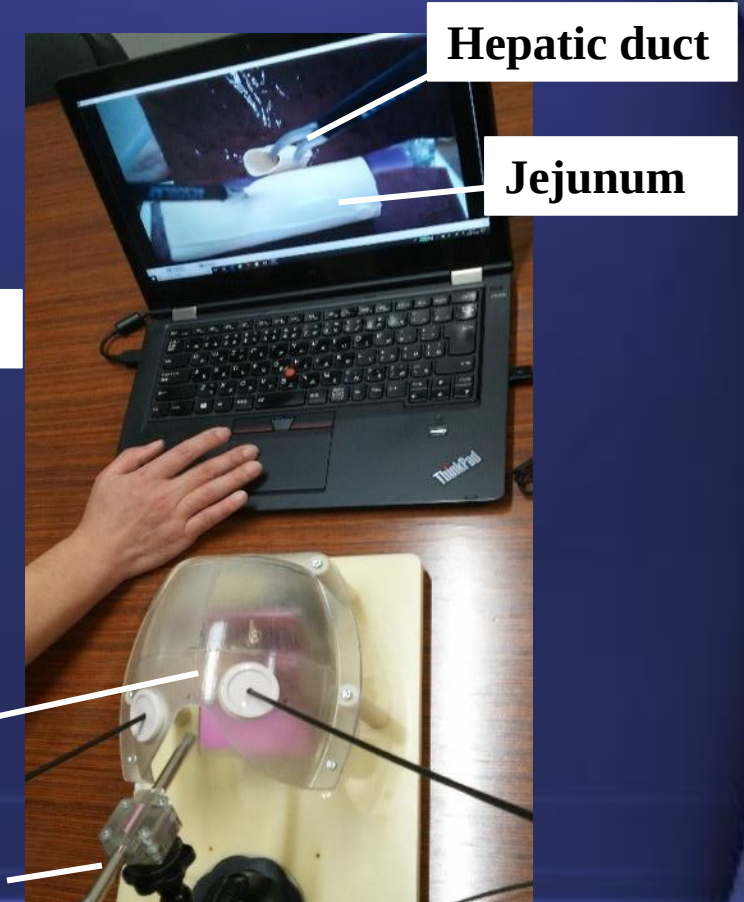
Duodenal atresia



Abdominal cavity model

Web camera

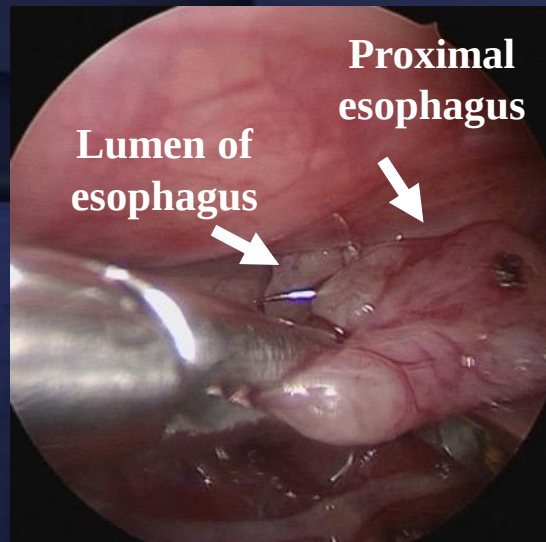
Duodenal atresia



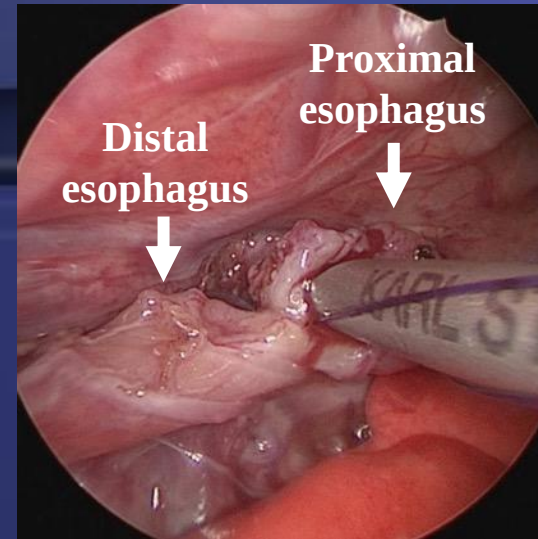
Hepatic duct

Jejunum

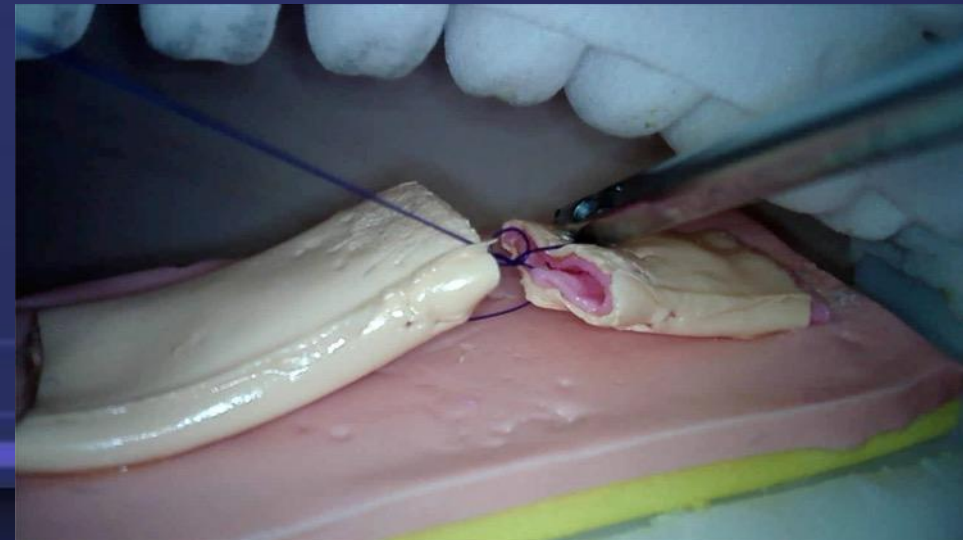
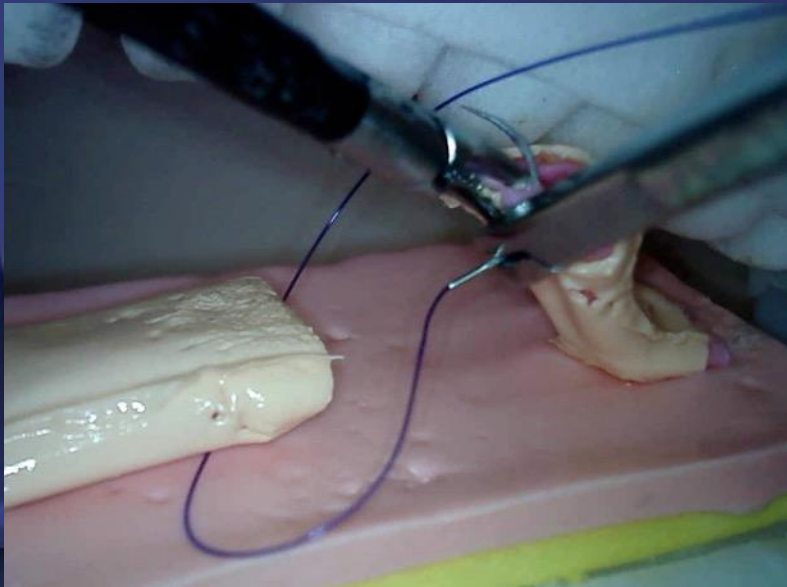
Hepaticojejunostomy



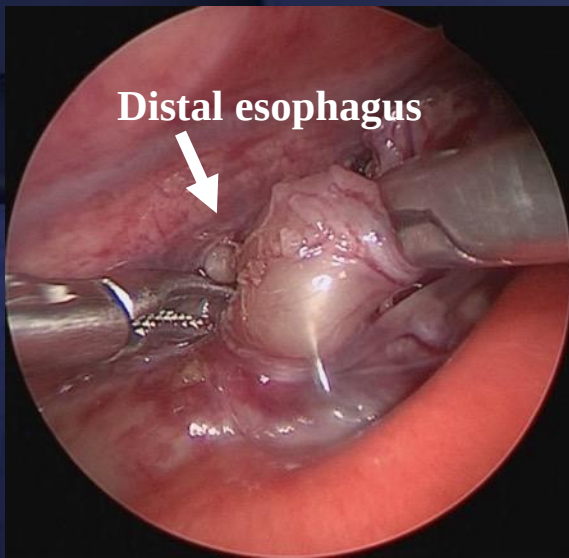
The first stitch
The first knot is made intraluminally.



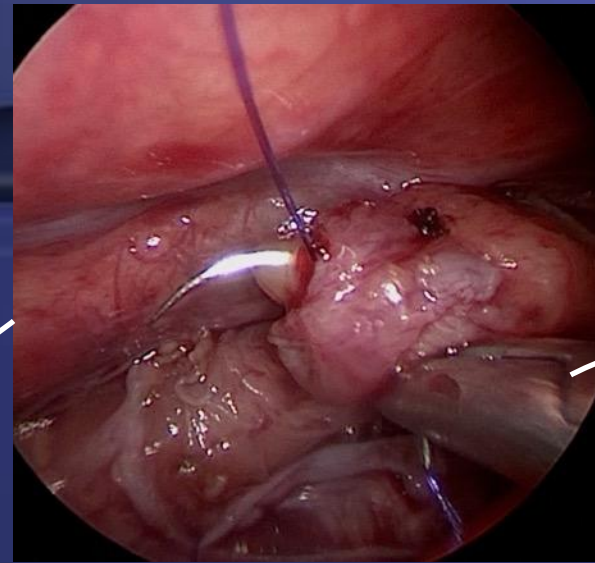
The first stitch
Extracorporeal or intracorporeal suture technique



Esophageal atresia model



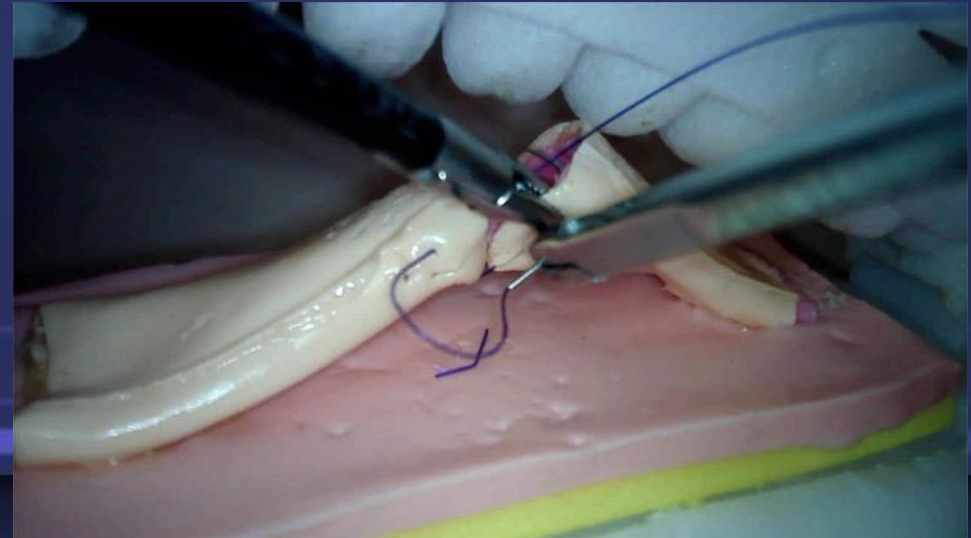
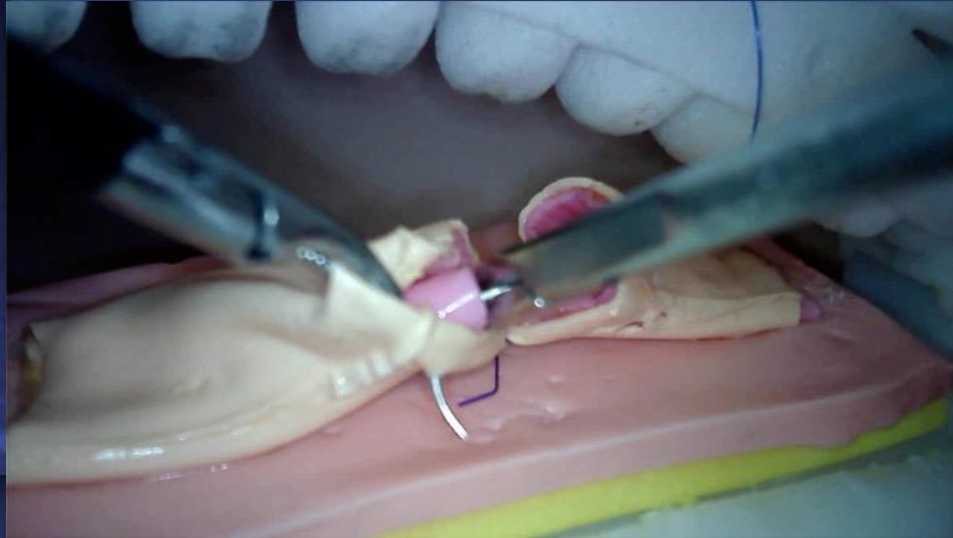
the second stitch



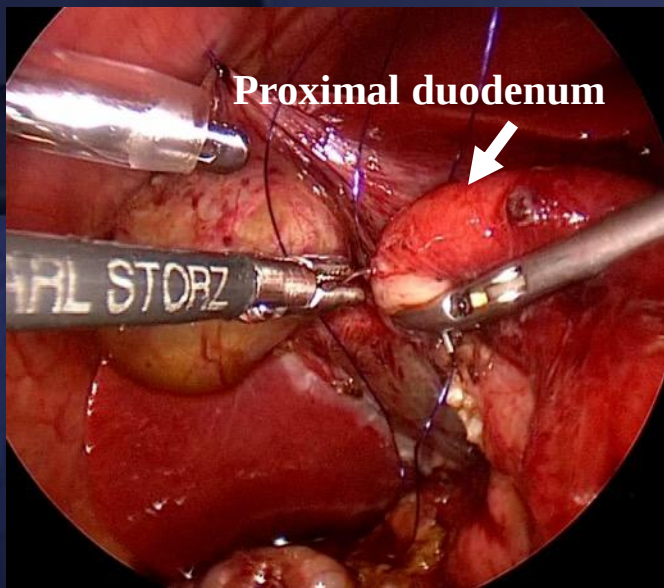
the second stitch

The second stitch

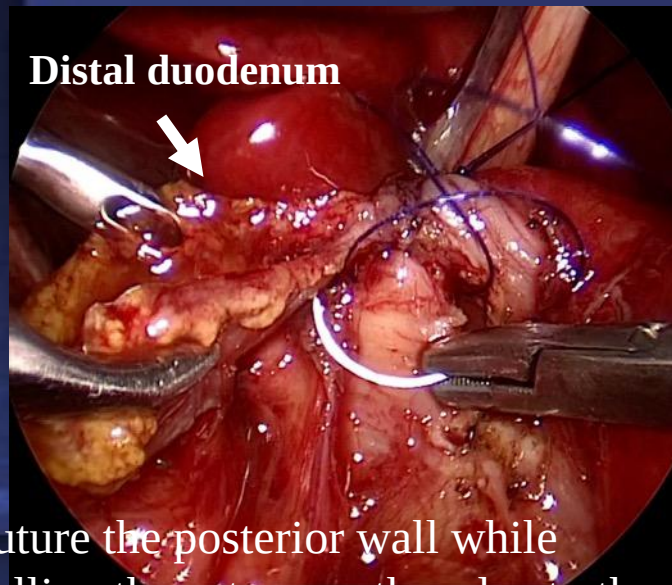
Start the second stitch from the mucosa of the distal esophagus to the proximal esophagus.



Esophageal atresia model



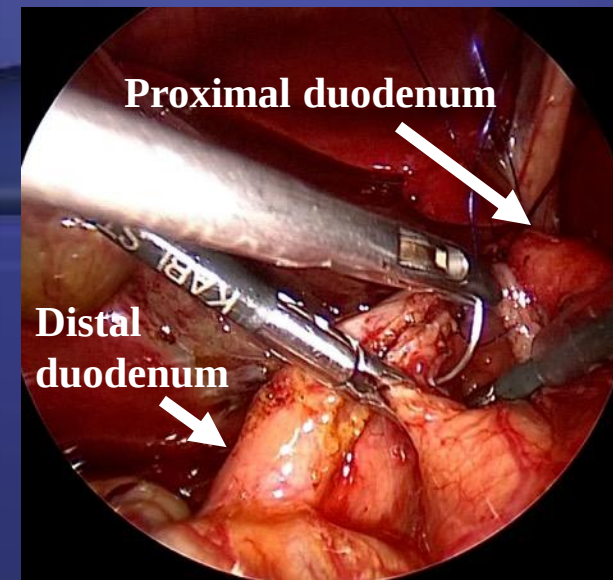
Start suturing from the right end.
(side-to-side anastomosis)



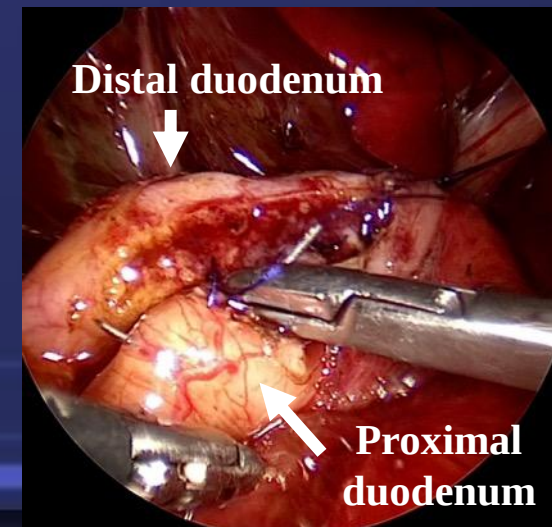
Suture the posterior wall while
pulling the suture on the edge to the
ventral side.



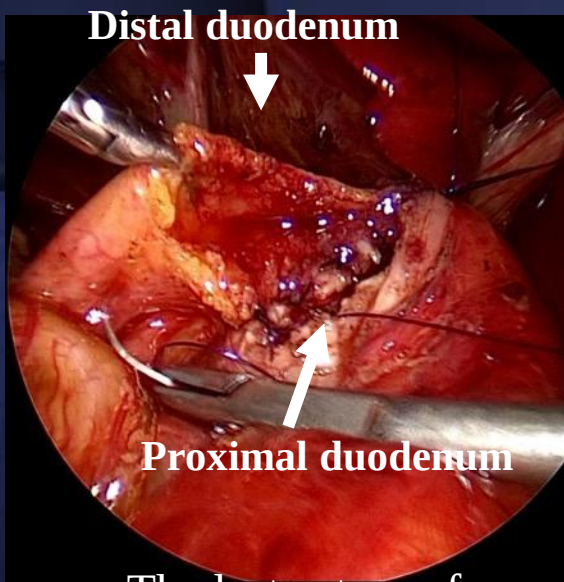
Duodenal atresia model



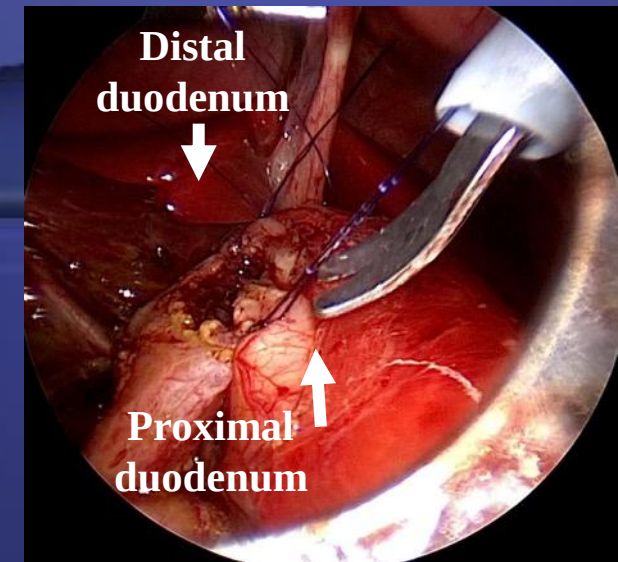
Suture the posterior wall
while pulling the suture on the edge
to the ventral side



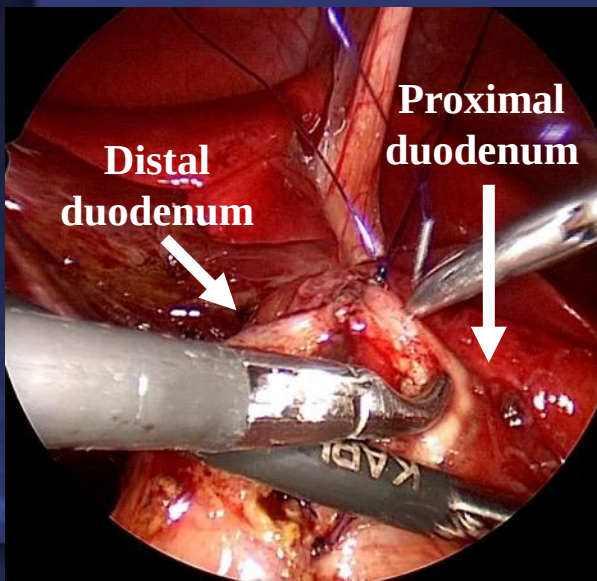
The last suture of the posterior wall.



The last suture of the posterior wall



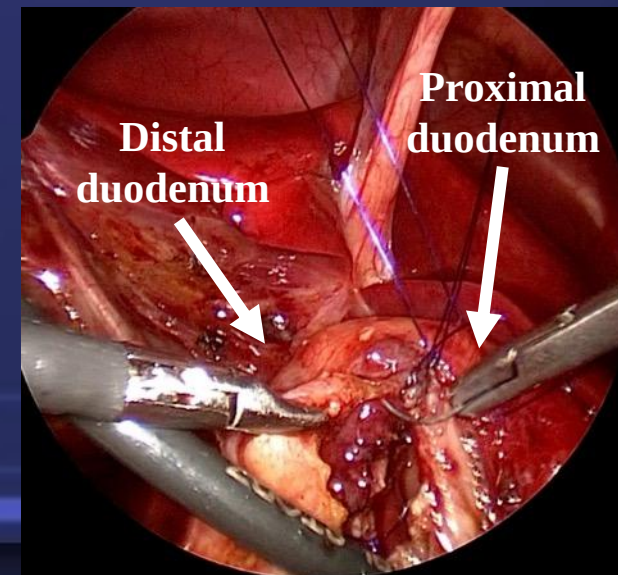
The last suture of the posterior wall



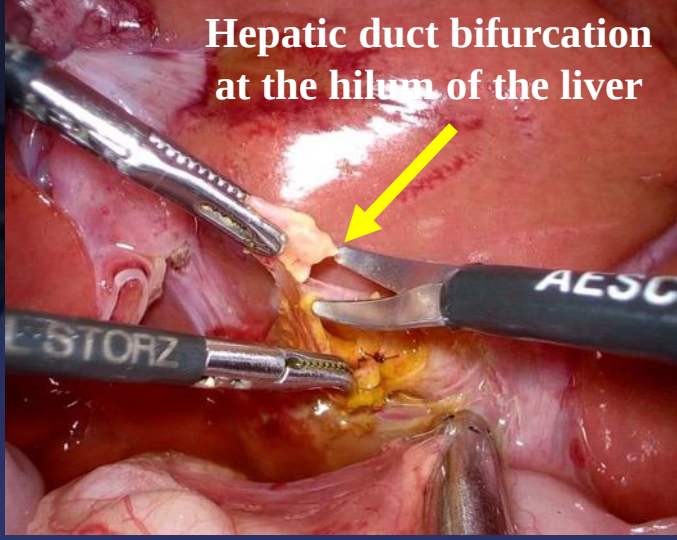
The first suture of the anterior wall



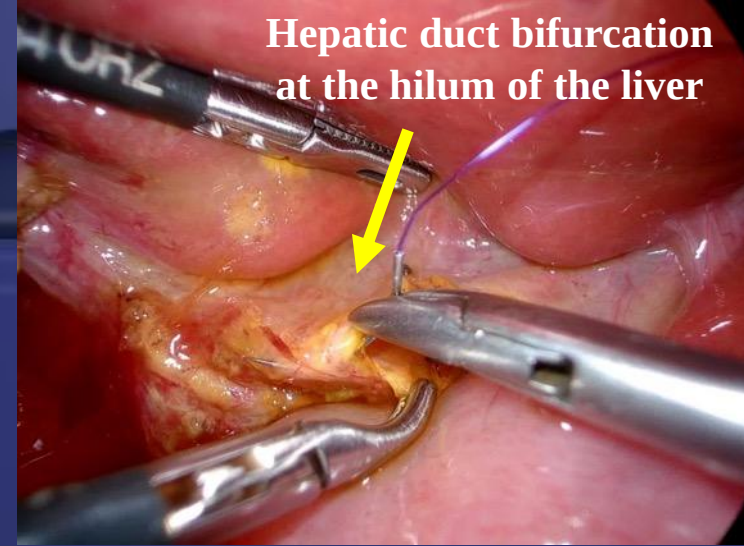
Duodenal atresia model



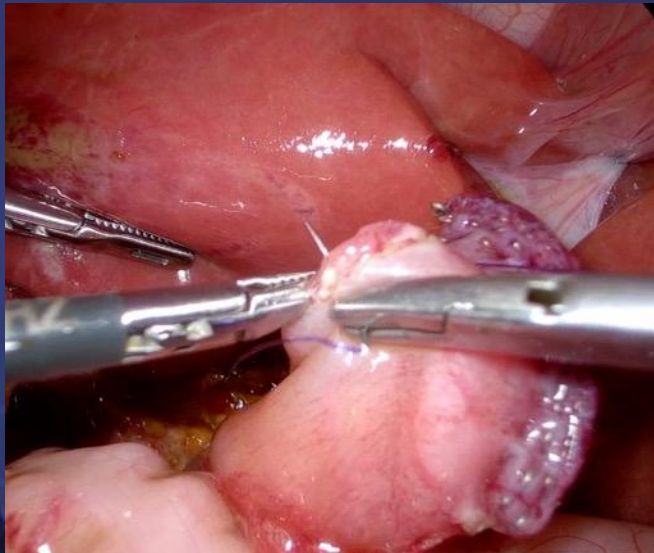
The first suture of the anterior wall



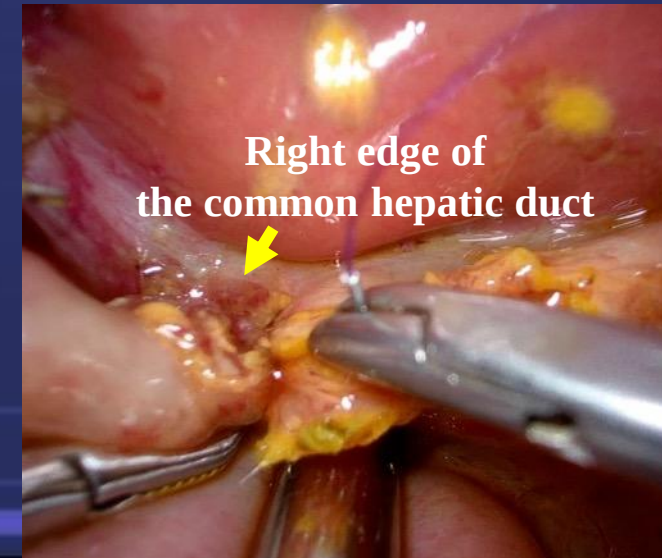
Trim the common hepatic duct
for bilioenteric anastomosis.



Start suturing from the right edge of
the common hepatic duct.

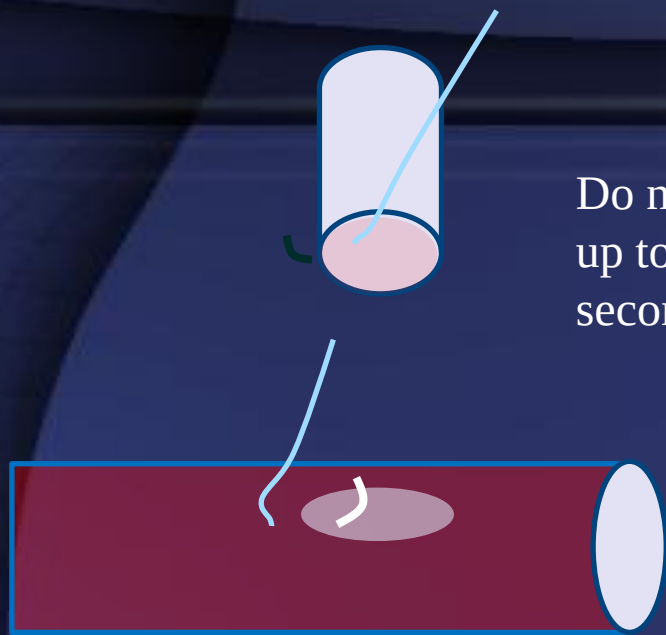


Place the suture at the right edge of the Roux-limb
with technique to reverse the needle.
Intracorporeal or extracorporeal knot tying



The second stitch of bilioenteric anastomosis
(the common hepatic duct)

Choledocal cyst model

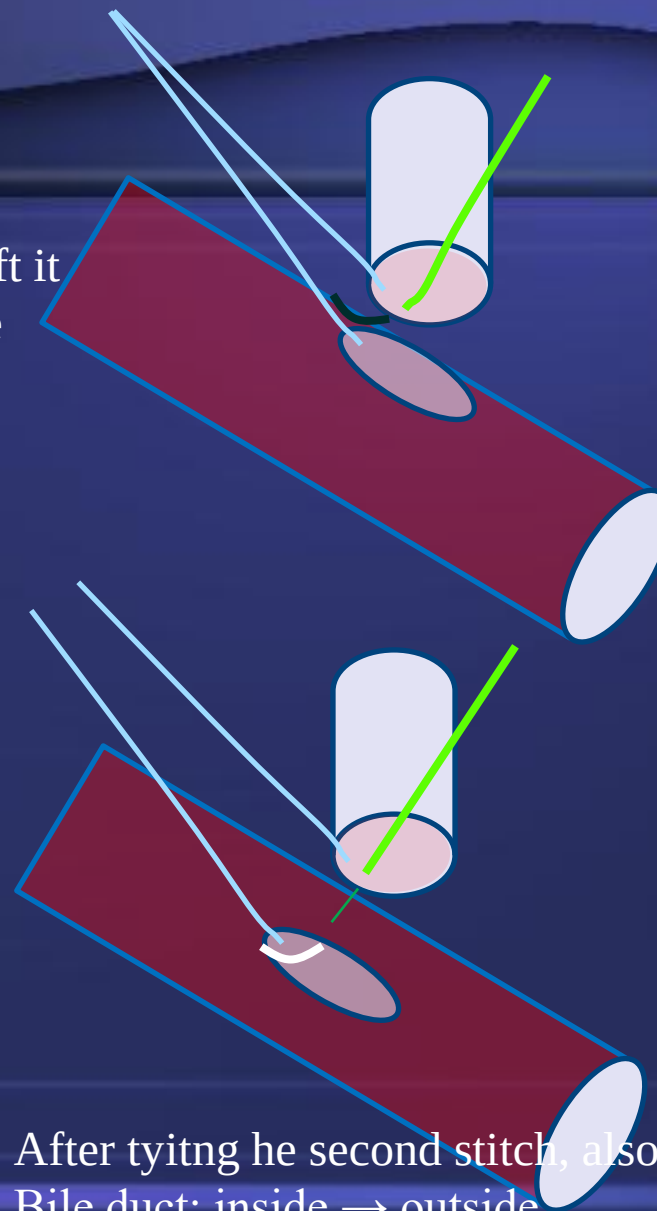


Do not tie the first stitch. Lift it up to make placement of the second stitch easier.

First stitch (right end):

Bile duct: inside → outside

Intestine: reverse needle, outside → inside



After tying the second stitch, also tie the first stitch.

Bile duct: inside → outside

Intestine: outside → inside

Choledocal cyst model