LETTER TO EDITOR

Incomplete Gallbladder Resection in Hourglass Deformity. How to Prevent it?

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Hourglass deformity of the gallbladder may be congenital or acquired. First time in 1890, it is observed as a constriction at the junction of middle- and lower-third of gallbladder, which divides the gallbladder into a wider upper zone and a smaller lower portion. Courvoisier[1] (1890) reported the hourglass gallbladder as a cicatrical contraction secondary to inflammation. It incidence is estimated between 1% and 3.33% of the specimens.[2,3]

Stasis distal to the constriction probably contributes to calculus formation and may provoke cancerous alteration. Cholecystectomy is clearly indicated in cases where calculi are present and may also be justified in those with significant biliary symptoms and radiological documentation of this abnormality.[4]

We have recently operated on a patient with this anomaly and during the surgical procedure the narrow area of hourglass deformity was clipped thinking that it was the cystic duct [Figure 1], later by dissecting the fat below the supposed cystic duct to locate the bile duct, we were able to verify that it was an hourglass gallbladder [Figure 2], and then we proceeded to complete the resection.

In Figure 3, we can see both pieces together of the specimen after complete resection.

We want to highlight this clinical case due to the danger of incomplete resection of the gallbladder by confusing the narrow area with the cystic duct. To avoid this type of accident, it is essential to dissect the distal area to the cystic duct and locate its entrance to the bile duct, to be completely sure that we have done a complete resection of the gallbladder.

Probably having an anatomical perspective before the surgical intervention, by means of an imaging test (especially Magnetic Cholangioresonance) would increase the safety of the procedure avoiding these inconveniences.

We finally emphasize the need for complete dissection and visualization of the cystic duct at the gallbladder prior its division and secure ligation during laparoscopic cholecystectomy.

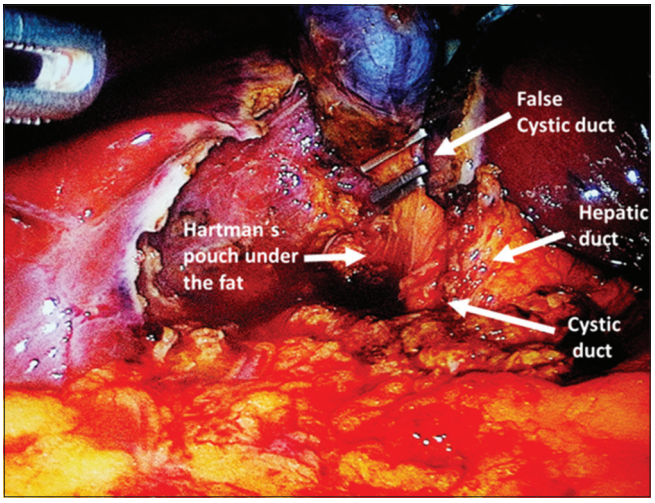

Figure 1: Narrow area of hourglass gallbladder clipped as false cystic duct

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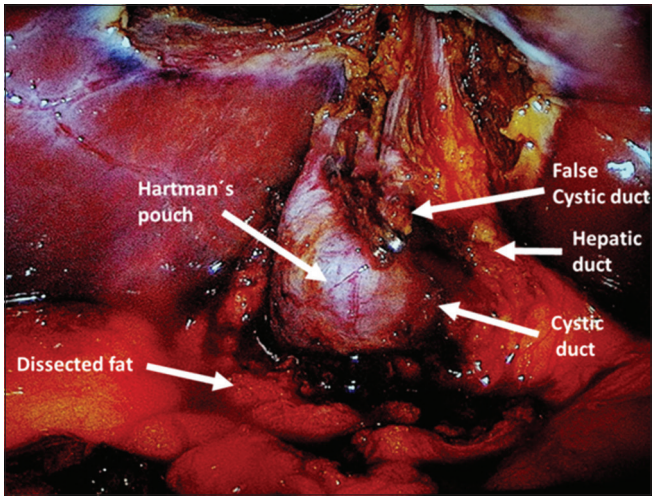

Figure 2: Gallbladder remnant below the false cystic duct

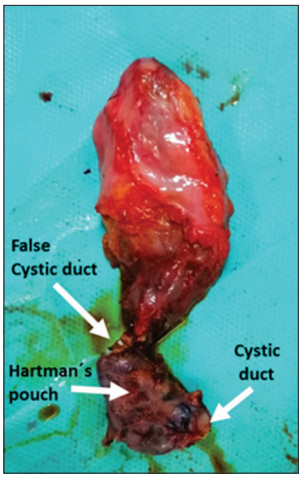

Figure 3: Specimen: Both pieces together after complete resection

REFERENCES

1. Courvoisier LG. Casvistich-Statistische Beitrage zur Pathologie und Chirugie der Gallenwege. 1st ed. Leipzig, Germany: F.C.W. Vogel; 1890.
2. Rajguru J, Khare S, Jain S, Ghai R, Singla M, Goel P. Variations in the external morphology of gall bladder. J Anat Soc India 2012;61:9-12.
3. Nadeem G. A study of the clinico-anatomical variations in the shape and size of gallbladder. J Morphol Sci 2016;33:62-7.
4. Hughes JH, Usnr MC. Hourglass gallbladder: An update. Mil Med 1986;151:603-4.

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