

Soft-tissue images. “Phrygian cap” gallbladder

A 51-year-old woman was seen with a 1-day history of continuous pain in the right upper abdominal quadrant and emesis. On physical examination she had tenderness in that area and was afebrile. The leukocyte count and results of liver function tests were within normal limits. Computed tomography (Fig. 1) demonstrated focal thickening in the wall of the gallbladder fundus. Ultrasonography, which was limited by her abdominal panus, showed 3 gallstones within the gallbladder. The patient’s pain did not resolve when antibiotics were given intravenously. Cholecystitis in the absence of a leukocytosis

was suspected, so radionuclide hepatobiliary scanning was done. It revealed a “hooked” gallbladder with delayed filling of the corpus and fundus (Fig. 2).

The patient underwent laparoscopic cholecystectomy. The operative specimen (Fig. 3) was folded in 2 locations, dividing it into 3 compartments, each containing a large gallstone. The pathologist noted chronic inflammatory changes. The woman was discharged from hospital on the first postoperative day.

The most common congenital anomaly of the biliary tract is a folded gallbladder.¹ Boyden described this anomaly as a “Phrygian cap” deformity

in 1935 because it resembled a bonnet worn by the ancient Phrygians,² who lived in Asia Minor during the 12th century BC.³ This type of gallbladder is thought to empty at a normal rate and, in contrast to our patient’s experience, is not thought to be of clinical importance.¹

Gallbladder kinking is suggested on radionuclide hepatobiliary imaging when the gallbladder initially appears smaller than the size of the gallbladder fossa and then fills distally on delayed images obtained after 2 and 3 hours.⁴ This deformity may also be suspected when its characteristic appearance is seen on high-resolution ultrasonography.¹

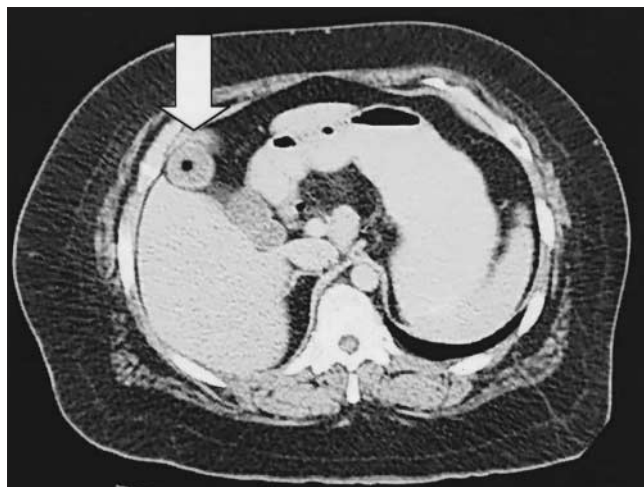


FIG. 1.

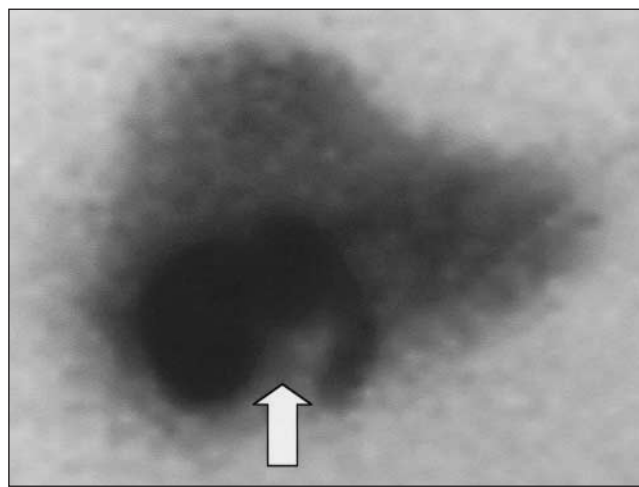


FIG. 2.

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Submissions to *Surgical Images*, soft-tissue section, should be sent to the section editors: Dr. David P. Girvan, Victoria Hospital Corporation, PO Box 5375, Station B, London ON N6A 5A5 or Dr. Nis Schmidt, Department of Surgery, St. Paul’s Hospital, 1081 Burrard St., Vancouver BC V6Z 1Y6.

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FIG. 3.

Recognition of a “Phrygian cap” gallbladder by nuclear scanning or sonography, with its potential for biliary stasis, cholelithiasis and cholecystitis, may warrant a prophylactic cholecystectomy.

References

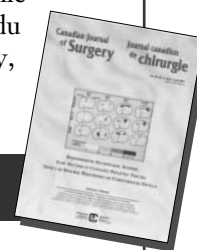
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LE PRIX MACLEAN–MUELLER

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Le *Journal canadien de chirurgie* offre chaque année un prix de 1000 \$ pour le meilleur manuscrit rédigé par un résident ou un fellow canadien d'un programme de spécialité qui n'a pas terminé sa formation ou n'a pas accepté de poste d'enseignant. Le manuscrit primé au cours d'une année civile sera publié dans un des premiers numéros (février ou avril) de l'année suivante et les autres manuscrits jugés publiables pourront paraître dans un numéro ultérieur du Journal.

Le résident devrait être le principal auteur du manuscrit, qui ne doit pas avoir été présenté ou publié ailleurs. Il faut le soumettre au *Journal canadien de chirurgie* au plus tard le 1^{er} octobre, à l'attention du Dr J.P. Waddell, corédacteur, *Journal canadien de chirurgie*, Division of Orthopaedic Surgery, St. Michael's Hospital, 30 Bond St., Toronto (Ontario) MTB 1W8.



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