



An approach for EUS-guided FNAB for suspected gallbladder malignancy

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It has been informative to go through the review by Ohno et al. When an endosonologist evaluates a patient with suspected gallbladder (GB) malignancy using tissue acquisition, the approach is very crucial in the management. Unfortunately, the approach for tissue acquisition is missing for suspected GB malignancy [1].

Diagnostic laparoscopy is the gold standard for staging Ca-GB [2]. Endoscopic ultrasound (EUS) can be used as a viable modality for reverse TNM staging in Ca-GB. Fine-needle biopsy (FNB) is preferred over fine-needle aspiration (FNA) as tissue is acquired in the core and a cytology slide can also be prepared from the same aspirate [3]. A third-generation 22G FNB needle like Franseen should be preferred over 19G as the tissue acquisition is better along with greater maneuverability and fewer adverse effects. Of all contrast-enhanced imaging modalities, contrast-enhanced EUS has the fewest adverse effects and can be used safely even in patients with renal insufficiency [4]. The sensitivity and specificity of EUS for hepatic and lymph-nodal metastasis are superior to those of magnetic resonance imaging and computed tomography, and they are further enhanced with use of a contrast agent like Sonazoid [5]. It also provides an

opportunity for concurrent EUS-FNAB of liver and nodal metastasis. Nodal metastasis to left infra-renal paraaortic nodes (16-B) is considered stage-IV malignancy and thus rules out resectability [6]. 16-B nodes can be easily sampled with EUS-FNAB and with good confidence [7]. A GB mass even less than 1 cm can be sampled with EUS-FNAB provided that there are no intervening blood vessels. The GB neck is fixed, i.e., it is near the porta hepatis, whereas the fundus and body can have variable positions. Compared to a transgastric approach, a transduodenal approach is safe as the portal vein and hepatic artery are outside the intervening field [1]. There is a potential risk of tract and peritoneal seeding, limiting its use only when either radical cholecystoduodenectomy is indicated or when neoadjuvant chemotherapy is planned. CA-GB is less desmogenic than CA-pancreas; however, its altered contrast enhancement pattern can guide the FNAB site as well as differentiate it from benign counterparts [8]. If GB drainage is adequate, the GB wall can be punctured and FNAB of the lesion on the opposite wall can be done [9]. In cases of obstructed biliary drainage, entering the GB lumen should be avoided to prevent biliary leak. Like in Ca-pancreas, newer studies have shown the potential beneficial role of neoadjuvant chemotherapy in borderline resectable and locally advanced Ca-GB [10]. Chemotherapy can only be given when the bilirubin level is normal to avoid drug toxicity. Thus, the role of biliary stenting in biliary obstruction for neoadjuvant therapy is crucial and requires early stenting. In hilar involvement in patients without cholangitis, cholangioscopy-guided biopsy is an excellent modality and is also free from risk of tract seeding [11]. The above points should be kept in mind by the endosonologist while embarking on tissue acquisitions in management of suspected GB malignancy.

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Declarations

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