

## **Gallbladder carcinoma: Which is the best method to diagnosis in patients with asymptomatic gallbladder polyps?**

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**BACKGROUND.** Gallbladder carcinoma (GBC) is the most common malignancy of the biliary tract and the 7th most common cancer of the digestive system . The tumor resection with clear margins remains as curative therapy . GBC can be detected from routine examinations in patients with or without symptoms. Early detection before symptoms is important to improve the prognosis . Vesicular polyp (VP) is a lesion that develops in the gallbladder wall. They may be benign or malignant. VP > 1 cm is considered an important factor of malignancy and requires surgical intervention.

**HYPOTHESIS.** To clarify the best imaging method to diagnose gallbladder cancer in asymptomatic patients with gallbladder polyps>1cm.

**METHODS.** A retrospective study of polyps and GBC using PubMed and SciELO, between years 2009 to 2015, was performed. They were analyzed polyp detection by abdominal ultrasound (AS), high-resolution ultrasonography (HRU), Endoscopic Ultrasonography (EU), computed tomography (CT), magnetic resonance imaging (MRI), endoscopic retrograde cholangiopancreatography (ERCP) and PET /CT 18F-FDG.

**RESULTS.** The ultrasound has a sensitivity of 93% and a specificity of 95.8% even in small lesions (Matos *et al* n = 95). In another study, the sensitivity was 97.84% (91/93 cases), and two patients presented adenocarcinoma of gallbladder. Inui *et al* reported that the HRU has a sensitivity of around 70-90%. However, EU has a sensitivity of 91.1%. The CT by hemodynamic technique can show when there is a substitution by a GBC mass, or when its wall is thick. Gallbladder polyps > 1.5 cm, with sessile format and not enhanced image perception, indicates malignancy. Regarding ERCP, diagnostic accuracy is not satisfactory because this method can only show a filling defect in GBC without outlining the surface of nodular lesions. MRI is not widely used because it has the disadvantages of low spatial resolution and intravenous contrast. With the use of 18F-FDG PET/CT, 20 neoplastic polyps and 30 benign were found.

**CONCLUSION.** :The present study showed that abdominal ultrasound is the best imaging method due to its sensitivity and specificity. This is a method of low cost and easy accessibility. However, it is an operator dependent method. Further studies are needed to better elucidate.