



# Comparison of Recommendations for Gallbladder Polyps and Gallbladder Wall Thickening Between KSAR and WFUMB Guidelines

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We read with interest the recently published 2025 Korean Society of Abdominal Radiology (KSAR) recommendations for gallbladder polyps (GBPs) and gallbladder wall thickening (GBWT) and recognize its alignment with the broader goal of standardizing management strategies for incidentally detected GBPs [1]. Along with the World Federation for Ultrasound in Medicine and Biology (WFUMB) position paper on incidental findings of the gallbladder and bile ducts [2], these guidelines illustrate a concerted effort to balance the risk of gallbladder malignancy against the potential harm of unnecessary surgery.

While both guidelines share the common objective of ensuring timely detection and appropriate management of GBPs, they differ in several key areas. First, size-based stratification shows subtle variations. The KSAR guidelines recommend cholecystectomy for GBPs  $\geq 10$  mm; surveillance

at 6, 12, and 24 months for polyps measuring 6–9 mm; and no further imaging for those  $\leq 5$  mm without risk factors. In comparison, WFUMB also advises cholecystectomy for GBPs  $\geq 10$  mm, however, places polyps 7–9 mm with risk factors on a surgical pathway, while those without risk factors undergo imaging follow-up at 6, 12, and 24 months. Additionally, they agree that polyps  $\leq 6$  mm without risk factors can be discharged from surveillance. Notably, the Society of Radiologists in Ultrasound consensus suggests that an extended follow-up beyond three years is generally not productive. If a polyp is followed up, a maximum of three years is sufficient to identify the vast majority of polyp-associated malignancies [3]. Therefore, precise measurement is vital for management. The KSAR guidelines advocate that ultrasound with a high-frequency transducer should be considered for further characterization of GBPs  $\geq 6$  mm detected on B-mode ultrasound. Dong et al. [4] also highlighted the potential of high-frequency transducers for the further characterization of GBWT detected by ultrasound.

Second, risk factor identification diverges between the KSAR and WFUMB. The KSAR guidelines identify risk factors, such as age  $>60$  years, history of primary sclerosing cholangitis, Asian ethnicity, and sessile ultrasound appearance. However, the WFUMB guidelines consider risk factors including age  $>50$  years, history of primary sclerosing cholangitis, Indian ethnicity, and sessile ultrasound appearance. Conversely, WFUMB lowers the age threshold to  $>50$  years, incorporates Indian ethnicity, and includes the same considerations of sessile morphology and primary sclerosing cholangitis. Consequently, KSAR recommends follow-up for GBPs  $\leq 5$  mm in the presence of any risk factor, whereas WFUMB does so for  $\leq 6$  mm polyps with risk factors.

Third, there is a growing emphasis on advanced ultrasound techniques for the better characterization of both GBPs and GBWT. The KSAR guidelines define the features related to adjacent GBWT or significant growth. For polyps with these features, cholecystectomy is recommended regardless of the size. Similarly, the European multi-society guidelines and Canadian Association of Radiologists Incidental Findings Working Group recommendations identify an increase in size as a concern for GBPs [5,6]. Additionally, gallbladder reporting and data system is an international consensus for the proposal of a risk stratification system for GBWT on

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**Table 1.** Comparison of recommendations for gallbladder polyps and gallbladder wall thickening between KSAR and WFUMB guidelines

	KSAR guidelines	WFUMB guidelines
Risk factors	Age >60 years History of primary sclerosing cholangitis Asian ethnicity Sessile ultrasound appearance	Age >50 years History of primary sclerosing cholangitis Indian ethnicity Sessile ultrasound appearance
Size-based stratification, mm		
≥10	Cholecystectomy	Cholecystectomy
6–9	Imaging follow-up at 6, 12, and 24 months	-
7–9	-	With risk factors: cholecystectomy Without risk factors: ultrasound follow-up at 6, 12, and 24 months
≤5	With risk factor: follow-up imaging is recommended at 6, 12, and 24 months Without risk factor: be discharged from further surveillance	-
≤6	-	With risk factor: follow-up imaging is advised at 6, 12, and 24 months Without risk factor: be discharged from further surveillance
Imaging features for cholecystectomy	Adjacent gallbladder wall thickness Significant growth	Multiparametric ultrasound features

KSAR = Korean Society of Abdominal Radiology, WFUMB = World Federation for Ultrasound in Medicine and Biology

ultrasonography [7]. In contrast, the WFUMB guidelines highlight the importance of multiparametric ultrasound features in assessing malignancy risk. Although the specific features are not detailed, the emphasis is on comprehensive ultrasound evaluation.

Regarding the clinical implications, both guidelines aim to balance the risk of malignancy with the potential harm of unnecessary cholecystectomy. The KSAR guidelines provide more detailed risk stratification based on size and specific risk factors, whereas the WFUMB guidelines emphasize the role of advanced ultrasound techniques in assessing malignancy risk. These differences may influence clinical decision-making, particularly in the management of polyps 6–9 mm in size and those related to imaging features. The notable differences between the two guidelines are summarized in Table 1.

In summary, while both the KSAR and WFUMB guidelines provide valuable frameworks for managing incidentally detected GBPs, they differ in their approaches to size-based stratification, risk factor identification, and the role of advanced imaging techniques. Clinicians should consider these differences in the context of their practice and patient population when determining an appropriate management strategy. We hope that this comparison will help clinicians navigate the differences and tailor management decisions to

their specific patient populations.

### Conflicts of Interest

The authors have no potential conflicts of interest to disclose.

### Author Contributions

Conceptualization: Yi Dong. Investigation: Rui Cheng. Supervision: Yi Dong. Validation: Rui Cheng. Writing—original draft: Rui Cheng. Writing—review & editing: all authors.

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