**Supplemental Materials and Methods**

***JSHBPS guideline*1**

As shown in the Table below, when polypoid lesion of the gallbladder is sessile, has a diameter ≥10 mm and/or grows rapidly, it is highly likely to be cancerous and should be resected. Because it is difficult to accurately define the growth of polyps, we defined sessile polyps ≥10 mm in diameter as requiring surgical treatment in this paper.

***ESGAR guideline*2**

Cholecystectomy is recommended for gallbladder polyps ≥10 mm. Management of polyps <10 mm depends on patient and polyp characteristics (cholelithiasis or inflammation). Cholecystectomy is recommended for polyps 6~9 mm with risk factors (age >50 years, primary sclerosing cholangitis, Indian ethnicity, or sessile). Polyps <6 mm need follow-up ultrasound at 6 months (as shown below).

***CCBS guideline*3**

Gallbladder polyps with malignant tendency have the following characteristics: (1) diameter ≥10 mm; (2) combined gallbladder stones or cholecystitis; (3) single or sessile polyps, with fast growth rate (growth rate >3 mm/6 months); and (4) adenomatous polyps. Satisfying any of these criteria is considered an indication of surgery.

***US-reported*4,5**

Color Doppler ultrasound devices were used. All patients underwent fasting for more than 8 h before the examination. The documented ultrasound images of the patients were reviewed retrospectively. A clinical diagnosis made by experienced sonologists based on the size (>10 mm), gallbladder wall thickening (>4 mm), echo intensity (inhomogeneous), procellaneous gallbladder, shape of the polyp and boundary with the surrounding tissues (irregular).

***Korean model*6**

PS (predictive score)=-7.3633 + 0.0374\*[age] + 0.6667\*[polyp number] + 1.5784\*[sessile] + 0.2189\*[polyp size]

**References**

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