The Ultrasonographic and Clinicopathologic Study of Polypoid Lesions in the Gall Bladder Measuring 15 mm or Less: The Difficulty in Differentiating Neoplastic Lesions

Yasuko MIZUSHIMA[1], Rin YAMAGUCHI[2], Masafumi UCHIDA[3],
Shinji UCHIDA[4], Michi MORITA[2], Mari KATOU[1], Toshirou YOKOYAMA[1],
Chiyoko TANAMACHI[1], Kouji HASHIMOTO[5] and Osamu NAKASHIMA[5]

Abstract

Purpose: There are some difficulties in differentiation neoplastic lesions (cancers and precancerous) polypoid lesions measuring 15 mm or less of the gallbladder in ultrasonography (US). We retrospectively examined the US findings by the pathological perspective about the differentiation of the 33 neoplastic lesions and cancers from polypoid lesions measuring 15 mm or less that could not be ruled out to be cancers in the preoperative US, and performed the cholecystectomy from Jan 2007 to Dec 2014.

Method: We investigated; (i) the histology of the polypoid lesions; (ii) the US findings of Ip-type/Is-type (neoplastic and non-neoplastic lesions) [size, the number of cases, position, surfaces, internal echoes, homogeneity] and a comparison between US findings and the pathological findings; (iii) the presence of IIa-type around the Ip-type/Is-type whether or not.

Result: (i) Out of 33 pathological diagnoses, neoplastic lesions were in 13/33 (39%). Non-neoplastic lesions accounted for 20/33 (61%). In the histology, chronic cholecystitis were in 6/20 (30%). Therefore, we omitted them from the following examinations. (ii) The histology of these 27 cases were; Ip-type [neoplastic lesions in 7/17 (41%) vs. non-neoplastic lesions in 10/17 (59%)] and, Is-type [neoplastic lesions in 6/10 (60%) vs. non-neoplastic lesions in 4/10 (40%)]. Among US findings, only the surface of Ip-type was significantly different [neoplastic lesions in 5/7 (71%) were smooth, and non-neoplastic lesions in 8/10 (59%) were irregular ($p=0.033$)], and these results were corresponded to the histology. (iii) IIa-types were found in 2/27 (7%), that were Ip-type and Is-type cancers, one each, respectively. IIa-type were both cancers similar to the main lesions.

Conculsion: In Ip-type lesions measuring 15 mm or less, the surface is useful for the differentiation whether neoplastic or not. In addition, the presence of IIa-type lesions is suspected to be a malignant. Therefore, the search for neighboring lesions is important.

Vol.41 No. 3 (2016) 251-260

---

[1]Department of Laboratory Medicine, Kurume University Medical Center, [2]Department of Pathology and Laboratory Medicine, Kurume University Medical Center, 3Department of Radiology, Kurume University Medical Center, [4]Department of Surgery, Kurume University Hospital, [5]Department of Laboratory Medicine, Kurume University Hospital

Received on September 18, 2015; Revision accepted on February 17, 2016