

20 mm 以下の浸潤性膵管癌 46 切除例の超音波像

小林 幸子 蓮尾 茂幸 宮越 基 中谷 稔 中島 幸恵
伊藤 智栄 相川 碧 長崎久美子 中島 哲 平岡 伸介

抄 録

目的：浸潤性膵管癌は予後不良で、早期発見および効果的治療の開発が望まれている。比較的予後良好な小腫瘍の段階での発見に、超音波検査の有用性が示唆されているが、多数例での検討報告は少なく、その診断法は未だ確立されていない。今回、20 mm 以下の浸潤性膵管癌 46 切除例の超音波所見について検討した。**対象と方法**：病理組織診断にて腫瘍径が 20 mm 以下と診断された 46 病変を対象とした。超音波所見（大きさ、形状、境界、輪郭、内部エコー、棘状突起様構造の有無、尾側主膵管拡張の有無、嚢胞状成分の有無）について検討した。17 病変にレボピストを用いた造影超音波を施行した。**結果**：B モードでは 46 病変中 42 病変で腫瘍を描出可能であった。主膵管拡張と途絶のみを認めた 4 病変中 3 病変は、造影超音波にて腫瘍像を確認できた。存在診断可能な 45 病変の腫瘍径は、8 ~ 22 mm、平均値 15.7 ± 3.8 mm であった。B モードにて腫瘍を描出可能であった 42 病変では、不整形 40 病変 (95.2%)、境界明瞭 28 病変 (66.7%)、42 病変すべて輪郭不整かつ低エコーを示した。棘状突起様構造 13 病変 (31.0%)、尾側主膵管拡張 32 病変 (69.6%)、嚢胞状成分 8 病変 (17.4%) に認めた。造影超音波を施行した 17 病変では、様々な造影態度を示した。**結論**：今回得られた所見から、腫瘍径が小さい病変でも通常経験する進行した浸潤性膵管癌と同様の所見を呈することがわかった。小さな病変であっても詳細に観察することで、浸潤性膵管癌と診断が可能と考えた。

Ultrasonographic findings of 46 resected cases with invasive ductal carcinoma of the pancreas within 20 mm in size

Sachiko KOBAYASHI, RMS, Shigeyuki HASUO, RMS, Motoi MIYAKOSHI, RMS,
Tomohiro NAKATANI, RMS, Yukie NAKAJIMA, RMS, Tomoe ITO, RMS, Midori AIKAWA, RMS,
Kumiko NAGASAKI, RMS, Satoshi NAKAJIMA, RMS, Nobuyoshi HIRAOKA

Abstract

Purpose: Pancreatic ductal adenocarcinoma (PDAC) is one of the worst cancers, and development of early detection methods and effective therapies for PDAC is needed. The usefulness of ultrasonography for early detection of small-sized PDAC has been suggested, although only limited reports have described in detail the ultrasonographic findings for small-sized tumors using large cohorts. Here we investigated ultrasonographic findings in 46 resected cases of PDAC in which the tumor diameter was 20 mm or less. **Subjects and Methods**: A total of 46 lesions from 46 patients with PDACs histopathologically determined to be 20 mm or less in diameter were investigated. Specific ultrasonographic findings included tumor size, shape, boundaries, contours, and internal signal intensity, as well as the presence/absence of spinous structures, dilatation of the pancreatic tail-side main pancreatic duct, or cystic components. Contrast-enhanced ultrasonography using Levovist was performed on 17 lesions. **Results**: Of the 46 lesions, 42 could be visualized as tumors in B mode. The remaining four lesions showed only dilatation and disruption of the main pancreatic duct, although three of them were detected as tumors on contrast-enhanced ultrasonography. The average size of these 45 detectable 45 tumors was 15.7 ± 3.8 mm (range 8 - 22 mm). Of the 42 lesions visualized in B mode, 40 (95.2%) were irregularly shaped, 28 (66.7%) were well circumscribed, and all demonstrated irregular contours and low signal intensity. Spinous structures, main pancreatic duct dilatation, and cystic components were observed in 13 (31.0%), 32 (69.6%), and eight lesions (17.4%), respectively. Various levels of contrast effect were observed for the 17 lesions on contrast-enhanced sonography. **Conclusions**: These results indicate that ultrasonographic findings obtained from small-sized PDACs are almost the same as those usually observed in cases of PDAC in advanced stages. It is suggested that even small-sized PDACs can be diagnosed through detailed ultrasonographic observation.

Keywords

ultrasonography, invasive ductal carcinoma of the pancreas, pT5