

論文の内容の要旨

論文題目 Pancreatic ductal variants as a predisposing factor for pancreatitis
 (膵炎の発症因子としての膵管の破格)
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Several pancreatic ductal variants have been reported. Though some of them have been suggested to be associated with pancreatitis, most of them were controversial probably due to biased sample populations based on endoscopic studies and the rarity of the variants. In the present study series, we aimed to elucidate the relevance of pancreatic ductal anatomical variation, especially of pancreas divisum, meandering main pancreatic duct, and Santorinicele without pancreas divisum, to the onset of pancreatitis based on less-biased population using non-invasive magnetic resonance cholangiopancreatography (MRCP). Thus our paper consists of three main studies: (1) pancreas divisum (PD) as a predisposing factor for idiopathic chronic and recurrent acute pancreatitis; (2) meandering main pancreatic duct (MMPD) as a relevant factor for

idiopathic recurrent acute pancreatitis; (3) Santorinicele without pancreas divisum (SWOP) might be relevant to a history of pancreatitis.

First, we investigated the relation of PD and idiopathic pancreatitis. We enrolled 504 subjects from the community and 46 patients with idiopathic pancreatitis (8 acute, 23 chronic, and 15 recurrent acute types of onset). All subjects underwent MR scanning to detect the presence or absence of PD (classified into classical PD, PD with absent ventral duct, and incomplete PD) and medical examination. The rate of PD was found significantly higher for all idiopathic/idiopathic chronic/idiopathic recurrent acute pancreatitis (33 – 43%) than in the community group (2.6%), but was not higher for idiopathic acute pancreatitis (13%). All the three PD subtypes (classical PD, PD with absent ventral duct, and incomplete PD) were indicated to induce idiopathic pancreatitis. We concluded that PD should be considered a predisposing factor for chronic and recurrent acute pancreatitis when no other established cause of pancreatitis was found.

Second, we investigated the relation of MMPD and idiopathic pancreatitis. We enrolled 504 subjects from the community and 30 patients with idiopathic pancreatitis (7 acute, 13 chronic, and 10 recurrent acute types of onset). All subjects underwent MR scanning to detect the presence or absence of MMPD (classified into loop type and reversed-Z type) and medical examination. The rate of MMPD was 40% in the patient

with idiopathic recurrent acute pancreatitis (RAP), which was much higher than that in the community (2.2%). Statistical analyses revealed MMPD (odds ratio, 29.0) and its loop/reverse-Z subtypes (odds ratio 20.2/24.2) to be a relevant factor to the onset of RAP. We concluded that MMPD should be considered a predisposing factor for RAP when no other established cause of pancreatitis was found.

Third, we investigated the gross rate of SWOP and its clinical and radiographic features. We enrolled 2905 subjects from the community and 2035 patients in our hospital who underwent abdominal MRCP studies. As result, Nine SWOP was found only from patient group and ten out of 12 cases aged 65 and over. Seven out of 12 cases were associated with pancreatitis including the two younger cases. We concluded that SWOP to be an rare variant and probably associated with aging and a history of pancreatitis.

In summary, we showed a new and strong evidence of pancreas divisum being a predisposing factor for idiopathic chronic pancreatitis or idiopathic recurrent acute pancreatitis and that of meandering main pancreatic duct (MMPD) being a relevant factor for idiopathic recurrent acute pancreatitis. We also showed a new but relatively weak evidence of SWOP being associated with pancreatitis.