Relationship Between of Bright Pancreas With Fatty Liver and Ischemic Heart Disease

Yasuhiro KOMIYAMA¹,³, Chika MOMOKI,² Daiki HABU³

Abstract

We focus on the bright pancreas, with fat accumulation in the pancreas, and evaluated the brightness by histogram values. The difference in brightness between pancreas and spleen was indicated as “pancreas-spleen difference” and was measured by abdominal ultrasonography. The risk of ischemic heart disease based on this pancreas-spleen difference was verified. Nineteen – patients which showed symptoms of coronary artery disease were used for a case-control study with 36 patients who had come to the hospital for a thorough physical check. Patients were matched for age and sex. The pancreas-spleen difference of the ischemic-heart-disease group was significant. A multivariate analysis conducted by using known risk factors for the onset of ischemic heart disease, such as obesity, smoking, and drinking, showed the importance of the pancreas-spleen contrast difference.

By using the screening method which added not only the liver, but the brightness elevation view of the pancreas, it became clear that brightness was the independent affector, with a high possibility for showing symptoms of ischemic heart disease.

¹Department Clinical Laboratory, Osaka Railway hospital, JR West, ²Department of Food and Nutrition, Faculty of contemporary Human Life Science, Tezukayama University, ³Graduate School of Human Life Science, Osaka City University

Received on September 22, 2014; Revision accepted on February 13, 2015