Single Institution, MR Based, Screening Program for Individuals at Risk for Pancreas Cancer

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Context Ten percent of all pancreatic cancers can be hereditary. A screening program for the individuals at risk (IAR) is recommended, but no defined surveillance modalities are available.

Objective To analyze the frequency of findings in IAR.

Methods From 2010 to 2013, all the patients with a "genetic risk" to develop pancreas cancer and referred to the Karolinska University Hospital, were included in a MR based surveillance program. All patients were investigated for the most common genetic mutation associated with pancreas cancer.

Results Forty patients were enrolled. There were 24 female and 16 man. The mean age was 49.9 years. The mean length of follow-up was 12.9 months. The number of relatives affected by pancreas cancer was 5 in 2 patients (5%), 4 in 5 patients (12.5%), 3 in 17 patients (42.5%), 2 in 14 patients (35%) and 1 in 2 patients (5%). In 4 patients (10%) a p16 mutation was found, in 3 patients a BRCA 2 mutation (7.5%), in 1 patient a BRCA 1 mutation (2.5%). In 16 patients (40%) a suspect lesion was found in the pancreas with MR. Fourteen patients (35%) had an IPMN and 2 patients (5%) had a pancreas cancer. Five patients (12.5%) required surgery (3 for PDCA and 2 for IPMN) and the remaining 35 patients continue with the surveillance program.

Conclusions During a median follow-up of just about one year, we detected pancreatic lesions in about 40% of our patients, of which three patients underwent surgery. Despite the relatively short time, the surveillance program in IAR seems to be effective.