

READ IT BEFORE YOUR PATIENTS

The Multicenter Cancer of Pancreas Screening Study: Impact on Stage and Survival

Mohamad Dbouk, Bryson W. Katona, Randall E. Brand, Amitabh Chak, Sapna Syngal, James J. Farrell, Fay Kastrinos, Elena M. Stoffel, Amanda L. Blackford, Anil K. Rustgi, Beth Dudley, Linda S. Lee, Ankit Chhoda, Richard Kwon, Gregory G. Ginsberg, Alison P. Klein, Ihab Kamel, Ralph H. Hruban, Jin He, Eun Ji Shin, Anne Marie Lennon, Marcia Irene Canto, Michael Goggins

JOURNAL OF CLINICAL ONCOLOGY OCT 2022

Abstract

PURPOSE

To report pancreas surveillance outcomes of high-risk individuals within the multicenter Cancer of Pancreas Screening-5 (CAPS5) study and to update outcomes of patients enrolled in prior CAPS studies.

METHODS

Individuals recommended for pancreas surveillance were prospectively enrolled into one of eight CAPS5 study centers between 2014 and 2021. The primary end point was the stage distribution of pancreatic ductal adenocarcinoma (PDAC) detected (stage I v higher-stage). Overall survival was determined using the Kaplan-Meier method.

RESULTS

Of 1,461 high-risk individuals enrolled into CAPS5, 48.5% had a pathogenic variant in a PDAC-susceptibility gene. Ten patients were diagnosed with PDAC, one of whom was diagnosed with metastatic PDAC 4 years after dropping out of surveillance. Of the remaining nine, seven (77.8%) had a stage I PDAC (by surgical pathology) detected during surveillance; one had stage II, and one had stage III disease. Seven of these nine patients with PDAC were alive after a median follow-up of 2.6 years. Eight additional patients underwent surgical resection for worrisome lesions; three had high-grade and five had low-grade dysplasia in their resected specimens. In the entire CAPS cohort (CAPS1-5 studies, 1,731 patients), 26 PDAC cases have been diagnosed, 19 within surveillance, 57.9% of whom had stage I and 5.2% had stage IV disease. By contrast, six of the seven PDACs (85.7%) detected outside surveillance were stage IV. Five-year survival to date of the patients with a screen-detected PDAC is 73.3%, and median overall survival is 9.8 years, compared with 1.5 years for patients diagnosed with PDAC outside surveillance (hazard ratio [95% CI]; 0.13 [0.03 to 0.50], P = .003).

CONCLUSION

Most pancreatic cancers diagnosed within the CAPS high-risk cohort in the recent years have had stage I disease with long-term survival.