Symptoms and Palliative Care Needs of Pancreatic Adenocarcinoma Patients

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Dear Editor:

Pancreatic adenocarcinoma is the fourth leading cause of cancer-related death in the United States with an overall five-year survival rate of 6%.¹ About 20% of pancreatic adenocarcinoma patients die within one year of diagnosis and those with metastatic disease at the time of diagnosis have a median survival of three to six months.^{2,3} Early supportive care has been shown to improve quality of life and increase survival in lung cancer patients.⁴ Previous literature has described depression and gastrointestinal symptoms as common prodromes for pancreatic adenocarcinoma. One study found depression in 38% of pancreatic cancer patients surveyed.^{5,6} However, little is known about pancreatic cancer patients' supportive care needs.⁷ Given the short life expectancy of these patients, early supportive care may be essential in improving patient's quality of life and possibly length of life.

We designed an online survey to assess symptoms and symptom management of newly diagnosed patients with pancreatic cancer. The survey was developed using input by focus groups comprised of patients with pancreatic adenocarcinoma, their caregivers, and their medical providers. The survey included questions about symptoms before and after diagnosis, medications used for symptom management, and participation in psychological and mind-body interventions. Patients with pancreatic adenocarcinoma seen in an oncologist's clinic at Stanford from November 2012 to September 2013 participated in the longitudinal study, including baseline and monthly follow-up surveys. Non-English speakers and patients transitioning to hospice were excluded.

Of 25 patients approached, 22 (88%) consented to participate and 16 (73%) completed the baseline questionnaire. The mean age of participants was 66 (SD=9.2; range=44–80 years). There was an equal number of men and women and the majority of participants were Caucasian (75%). Seventy five percent of participants were status post tumor resection with 62.5% having received a Whipple procedure. The median time between participant diagnosis and completion of the baseline survey was 6.1 months (range=0.8–29.3).

In contrast to previous literature, we found that most participants in our sample did not experience either gastrointestinal symptoms or depression. Prior to a diagnosis of

cancer, no participants reported depression, nausea, or vomiting; only 13% indicated weight loss, and 6% experienced lack of appetite. Surprisingly, neurological symptoms such as pain (50%), fatigue (38%), sleep problems (38%), and memory difficulties (31%) were the most prevalent symptoms prior to diagnosis.

Many of the patients self-initiated psychological interventions in order to manage their symptoms. The most common therapy used at baseline was spiritual practices (56%) (see Table 1 for summary). All of the patients we surveyed with unresectable tumors participated in spiritual-based activities, with a median of 2 sessions (range=1–7) in the past week and a median of 60 minutes per session (range=5–90). There was no correlation between participation in spiritual practices and severity of symptoms experienced.

On a scale of 0 “not present” to 10 “worst imaginable,” patients with unresectable versus resectable tumors initially had more severe pain (7.0 versus 1.8), depression (4.5 versus 0.1), and anxiety (4.5 versus 0.7). A month after the baseline survey, patients with unresectable tumors reported no symptoms of depression (0) and very low anxiety (0.7). In contrast, participants with resectable tumors experienced increased anxiety (2.2) one month after baseline.

While this study has limitations in the small sample size and recall bias, these results suggest that pancreatic adenocarcinoma patients may have more neurological/psychological symptoms at diagnosis, such as sleep and cognitive difficulties, and fewer gastrointestinal symptoms at diagnosis than previously recognized.

As expected, patients with unresectable disease had increased depression/anxiety, as compared to patients with resectable disease at diagnosis. However, interestingly, in follow-up, patients who had unresectable disease had lower depression/anxiety compared to those who had surgery. While we did not investigate the cause behind the decrease in these psychological symptoms, it is possible that confirmation of the incurability of a patient's disease may bring relief and decrease anxiety.

Our findings highlight the importance of managing neurological/psychological symptoms (pain, fatigue, sleep problems, and memory difficulties) in pancreatic adenocarcinoma

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TABLE 1. PSYCHOLOGICAL AND MIND-BODY ACTIVITY PARTICIPATION IN PANCREATIC CANCER PATIENTS

<i>Practice</i>	<i>Participation</i>
Spirituality-based	56%
Meditation	12.5%
Mind-body movements (i.e., yoga, tai chi, qigong)	12.5%
Acupuncture	6%
Biofeedback	6%
Support groups	6%

patients at diagnosis and providing support for anxiety/depression—especially in patients with resectable disease after surgery utilizing a multimodal approach. Unresectable pancreatic adenocarcinoma patients' high level of participation in spiritual practices suggests that they may derive psychological benefits from spiritual activities. Thus, eliciting a history of mind-body activities, especially a spiritual history, will be important for in patients with unresectable pancreatic adenocarcinoma.⁸

More research is needed to determine which supportive care practices will most benefit pancreatic cancer patients with resectable versus unresectable disease at diagnosis and throughout treatment. Specifically, future work should explore the role of medical and psychological interventions in symptom management at diagnosis and the role of spiritual activities in patients with unresectable disease with the goal of optimizing supportive care programs for patients with pancreatic adenocarcinoma.

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