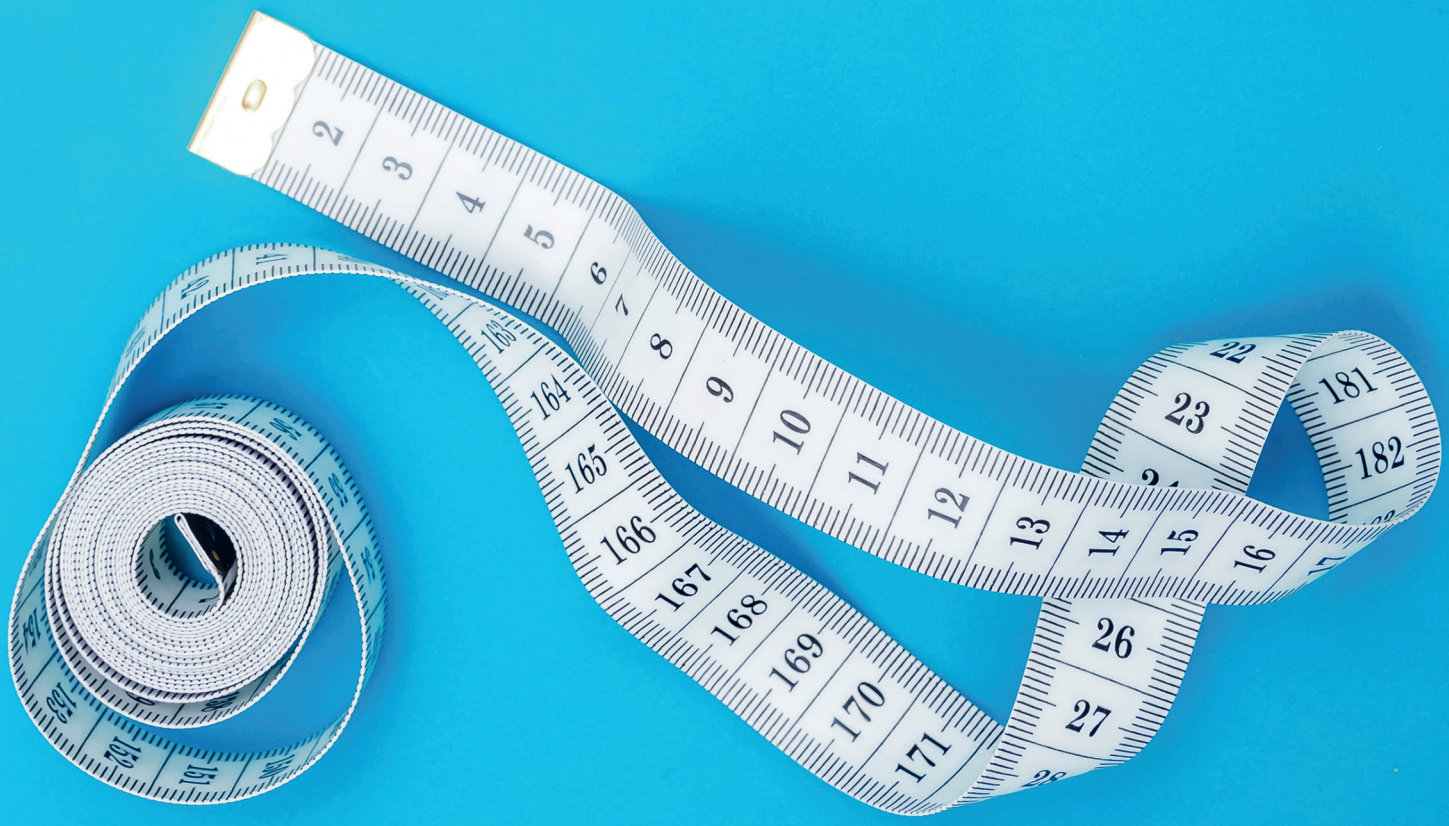
Tailoring Distress Screening in Oncology Populations



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Timing distress screening in surgically resectable esophageal cancer

Abstract

Objectives: Distress screening has now become part of the culture of cancer care, with clinical practice guidelines set forth by the National Comprehensive Cancer Network (NCCN) and requirements by the Commission on Cancer (CoC). Because interdisciplinary teams are specialists in treating certain disease sites, it is important to develop distress screening guidelines that best serve that patient population and their treatment.

Methods: A retrospective review of patients with surgically resectable esophageal cancer who were treated at a single institution was performed. Patients voluntarily undergoing the prehabilitation program (n = 11) received a structured protocol intervention in several clinical domains, including psychosocial distress screening.

Results: Despite having a protocol, variations in the number of times patients were screened for distress (range, 1-9 times; mean = 4.73) suggests that the protocol was not accomplished. Elapsed time between first and final distress screens ranged from 0 to 68 days (mean = 40.27), and time from final distress screen to surgery ranged from 50 to 122 days, with a mean of 76.45 days.

Significance of Results: The pilot prehabilitation program demonstrated difficulties with the distress screening protocol. Subsequently, a more comprehensive distress screening program is recommended in this highly vulnerable patient population by aligning the NCCN distress management screening guidelines with the clinical pathway for treating surgically resectable esophageal cancer. With the difficult prognosis and treatment known for patients with esophageal cancer, tailored distress screening protocols should be implemented throughout the duration of treatment.

Distress screening is a required part of cancer care secondary to initiatives from the NCCN, the National Academy of Medicine, and the CoC. Patients with cancer have twice the risk of experiencing depression and anxiety than the general population,[1] and patients with gastrointestinal cancer have higher levels of anxiety than patients with other metastases from other cancers.[2] Esophageal cancer has a poor prognosis, with a less than 15 percent overall five-year survival rate[3] and with only 25 percent of patients eligible for surgery as a treatment.[4] Surgically resectable esophageal cancer cases follow a somewhat predictable path to surgery. Following an initial workup, patients typically receive neoadjuvant treatment that includes sequential chemotherapy and chemoradiation. Following the neoadjuvant treatment, patients at our cancer program then have a four-week break before pre-surgical restaging occurs. At restaging, some patients are no longer eligible for surgery due to the tumor's lack of response to neoadjuvant treatment. For those who are eligible for surgery, surgery is extensive and is associated with high morbidity or recurrence.[5] The survival rate even for that initial 25 percent who are eligible for surgery at time of diagnosis is low, with the post-operative survival rate of less than 35 percent.[6]

Though the NCCN and CoC have developed guidelines for distress management, these offer sweeping standards of care that are broadly developed to fit any oncology disease; it is therefore left up to the healthcare team to define the exact and appropriate intervals for screening based on clinical indication and clinical practice guidelines. CoC requires distress screening at one time for all patients with cancer. NCCN suggests that ideal screening would happen at every medical visit and, at a minimum, at the initial visit, appropriate intervals, and as clinically indicated related to changes in the patient's disease status. The NCCN recommends that a full clinical assessment should occur when there is clinical evidence of moderate to severe distress. In an effort to reach the CoC mandate for distress screening, many cancer programs have implemented standards for distress management at their institution that take a one-size-fits-all approach and are not specific to the cancer type or treatment. NCCN has developed clinical practice guidelines for the medical treatment of cancer by disease site. Because interdisciplinary teams become specialists in treating certain disease sites, it is important to develop distress screening guidelines that best serve specific patient populations and their treatment.

Methods

At our National Cancer Institute-designated NCCN Comprehensive Cancer Center, our esophageal cancer multidisciplinary working group consists of medical oncologists, surgical oncologists, radiation oncologists, pharmacists, advanced practice providers, psychologists, social workers, and registered dietitians. In our work, our team has tailored supportive care services for patients with esophageal cancer who are eligible for surgery at time of diagnosis to improve outcomes. We tailored distress screening in this highly vulnerable population by aligning the CoC and NCCN distress management screening guidelines with our institution's clinical pathway for treating surgically resectable esophageal cancer.

Design and Data Collection

Patients were eligible for our quality improvement prehabilitation project (Seeking to Reactivate Esophageal aNd Gastric Treatment Health; STRENGTH) if they had resectable esophageal cancer, were a candidate for surgery, and planned to undergo neoadjuvant therapy. The STRENGTH program is the implementation of a standardized pathway of supportive interventions that includes an order set in the electronic health record; full procedure and overall results for the project are viewable elsewhere.[7]

Sixteen patients were offered participation in the STRENGTH program but those with interval progression of disease or seeking part of their care elsewhere were excluded from analysis because they did not proceed to surgery. The study was approved by the Colorado Institutional Review Board. See Table 1, below, for patients' demographic information.

Distress screening was completed via a modified version of the NCCN distress thermometer and problem list for patients.[8] Protocol included completion of the distress screener at time of initial presentation to our cancer program and then additionally at each infusion visit (compared to screening at new patient visits, which was standard at our cancer program).

Instructions for the distress screen process were provided to the infusion center check-in staff. Patients enrolled in the STRENGTH program were given paper copies of the distress

Table 1. Patient Demographics

	***n*=11**
Age (years)	67.3 (mean) 57-75 (range)
Gender	Females: *n* = 2 (18%) Males: *n* = 9 (82%)
Race	Caucasian: *n* = 11 (100%)
Ethnicity	Hispanic: *n* = 2 (18%) Non-Hispanic: *n* = 9 (82%)
Cancer stage	Stage 2: *n* = 5 (45.5%) Stage 3: *n* = 6 (54.5%)
Caregiver	Daughter: *n* = 1 (9%) No caregiver: *n* = 3 (27%) Spouse: *n* = 7 (64%)
Marital status	Divorced: *n* = 3 (27%) Married: *n* = 8 (73%)
Distance from cancer center (miles)	208 (mean) 6.9-768 (range)

measure at each chemotherapy visit. Staff were instructed to ask patients to complete the paper distress screening tool in the waiting room and hand it back to the same staff member when completed. Staff were directed to page the social worker if the patient had a distress screen score of six or higher (range, 0-10) on any of the four distress quadrants (Emotional Concerns, Health Concerns, Social Concerns, Practical Concerns).

Because patients typically undergo chemotherapy and radiation, followed by surgery, the STRENGTH program used the following algorithm. When chemoradiation begins, the STRENGTH pathway is activated. Patients then completed 4 to 6 weeks of chemoradiation and surgery was scheduled for 6 to 12 weeks after completion of neoadjuvant therapy.

Building psychosocial oncology care plans based on a patient's specific diagnosis and treatment can further personalize supportive care beyond distress screening, which can lead to less suffering, better care satisfaction, and enhanced health outcomes.

Results

Large variations occurred in the number of times patients were screened for distress, with a range of 1 to 9 times and mean of 4.73 times (see Table 2, below). Reasons for variations in completions of distress screening included patient declining, patient survey fatigue, staff not giving it to patients when intended, and patients receiving it during non-chemotherapy infusion visits (such as during hydration infusions). Total elapsed time between first and final distress screening was calculated, with a mean of 40.27 days (range, 0-68). Elapsed time from final distress screening to end of neoadjuvant treatment was calculated as a measure of whether screening continued throughout chemotherapy; the mean was 15.36 days (range, –13 days [patient received distress screen at hydration infusion after completion of neoadjuvant treatment, which was not part of the protocol] to 69 days [patient was only screened for distress at initial oncology visit and none of the infusion visits]). Finally, time from final distress screening to surgery was calculated, with a mean of 76.45 days (range, 50-112; see Table 2).

Table 2. Completion of Distress Screen and Time Between Completions

	Number of Completed Distress Screens	Elapsed Time (Days) from First Distress Screen to Last Distress Screen	Elapsed Time (Days) from Last Distress Screen to End of Neoadjuvant Treatment	Elapsed Time (Days) from Last Distress Screen to Surgery
Participant 1	4	68	22	79
Participant 2	6	55	4	72
Participant 3	2	14	10	94
Participant 4	6	35	10	79
Participant 5	6	50	8	71
Participant 6	5	35	2	50
Participant 7	9	68	–13	58
Participant 8	8	55	3	51
Participant 9	5	63	7	64
Participant 10	1	0	47	111
Participant 11	1	0	69	112
Mean	4.73	40.27	15.36	76.45

Discussion

Results reveal several issues. Patients reported survey fatigue from frequency (weekly per protocol) of being asked to complete the distress screening at chemotherapy visits. Because some patients were inappropriately asked to complete the screening at hydration infusions as well, some were asked more frequently than weekly. Infusion staff changes during this project led to inconsistency in script and delivery of distress screening to patients.

Some critical times in the patients' treatment were missed and some patients did not respond due to survey fatigue. Many did not live close enough to come in to discuss symptoms of distress with a provider at our cancer program and may have benefited from telephone check-ins.

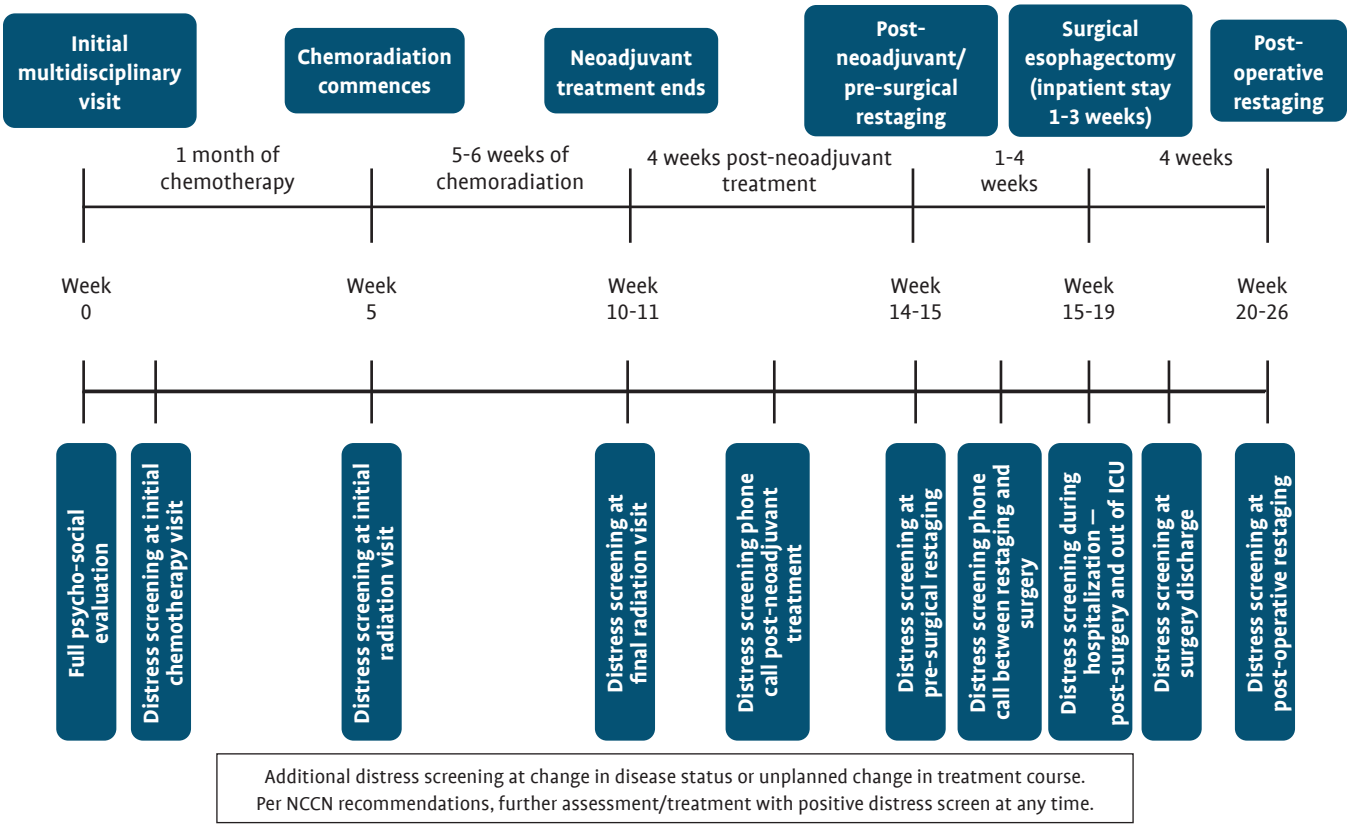
Next Steps: Proposed Timing of Distress Screening

Learning from our experience, we developed a proposed timing for distress screening for patients being treated for surgically resectable esophageal cancer that we plan to implement going forward. Specifically, we suggest an initial meeting with an oncology social worker to complete a full psychosocial assessment to identify barriers to care and therefore proactively address them. We then suggest distress screening at time periods that indicate treatment change (see Figure 1, below):

- In-person distress screening at initial chemotherapy visit
- In-person distress screening at first radiation visit
- In-person distress screening at final radiation visit
- Telephone distress screening at week two of the four weeks from the end of neoadjuvant treatment to pre-surgical restaging
- In-person distress screening at pre-surgical restaging
- Telephone distress screening between restaging and surgery
- In-person distress screening during inpatient hospital stay for planned surgery
- In-person distress screening at surgery discharge
- In-person distress screening at post-operative restaging.

We also recommend that any change in treatment plan or change in disease status activate the distress screening process as well because those times have the potential for high distress.[9]

Figure 1. Surgically Resectable Esophageal Cancer Clinical Pathway with Distress Screening Recommendations



Conclusion

The protocol of our quality improvement process attempted to screen patients for distress at increased time intervals during the chemotherapy portion of their treatment (while in infusion for chemotherapy). In retrospect this model only captured distress screening data during one phase of treatment and therefore missed opportunities to screen at other potentially vulnerable time periods. A distress screening best practice personalizes the timing of patients' distress screening to be concurrent with their entire medical plan of care, such as we propose in Figure 1. This model of aligning medical care plans with distress screening is replicable for other cancer types and respective treatment care plans. Building psychosocial oncology care plans based on a patient's specific diagnosis and treatment can further personalize supportive care beyond distress screening, which can lead to less suffering, better care satisfaction, and enhanced health outcomes.[9]

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