

POSTER 50

Title

Examining Patient Perspectives on Sarcoma Surveillance: The Sarcoma Surveillance Survey

Authors

Sarah C. Tepper, MD,¹ Anna K. Holten, BA,² Donna B. Jeffe, PhD,³ Patrick H. England, BA,² Zachery L. Hong, BA,² Maria I. Pérez, MA,³ Michelle Ghert, MD, FRCSC,⁴ Angela C. Hirbe, MD, PhD,⁵ Cara A. Cipriano, MD, MSc⁶

Author Affiliations

1. Midwest Orthopaedics at Rush University Medical Center, Chicago, Illinois; sarah_c_tepper@rush.edu
2. Department of Orthopedic Surgery, Washington University, St. Louis, Missouri; akholt@wustl.edu, pengland@wustl.edu, zacheryhong@wustl.edu
3. Department of Medicine, Washington University, St. Louis, Missouri; jeffedonnab@wustl.edu, mperez@wustl.edu
4. McMaster University and Hamilton Health Sciences, Department of Surgery, Hamilton, Ontario, Canada; ghertm@mcmaster.ca
5. Division of Oncology, Washington University, St. Louis Missouri; hirbea@wustl.edu
6. Department of Orthopedic Surgery, University of Pennsylvania, Philadelphia, Pennsylvania; Cara.cipriano@penmedicine.upenn.edu

Background

The most common site of sarcoma metastasis is the lungs, making pulmonary surveillance an important aspect of sarcoma management. The optimal frequency and modality of sarcoma surveillance imaging are uncertain, and current practices vary substantially. The sarcoma community has recognized the need for evidence-based surveillance protocols, and efforts to develop unified guidelines are ongoing. However, sarcoma patients' preferences and concerns regarding surveillance imaging have not yet been examined. The value of patient-centered medicine is becoming increasingly recognized, and shared decision-making has become a standard of care. Accordingly, patient perspectives and priorities should be considered when creating and implementing surveillance protocols.

Questions/Purposes

The primary purpose of this study was to develop and pilot the novel Sarcoma Surveillance Survey, to assess patients' concerns related to sarcoma surveillance as well as their preferences for frequency of surveillance. The secondary purpose was to examine associations between the Survey results and previously validated measures of anxiety and patients' positive and negative emotional appraisals of surveillance imaging.

Patients and Methods

This was a single-center, cross-sectional study that included patients with non-recurrent, non-metastatic sarcoma who had completed surgical treatment for sarcoma between 2014 and 2019 and were receiving surveillance imaging. Patients with surveillance imaging appointments during a 6-month period were administered the Sarcoma Surveillance Survey, which consists of 10 novel survey items designed to assess patient concerns about surveillance imaging and preference for more or less frequent imaging. Patients were also administered the Appraisal Scale, a validated measure that assesses positive and negative emotions related to a stressor, and the Patient-Reported Outcomes Measurement Information System Anxiety 8a survey, which was used as a measure of anxiety. Correlations between the Sarcoma Surveillance Survey items and the Appraisal scales and Anxiety 8a scores were analyzed, as were differences in Sarcoma Surveillance Survey responses between different patient demographic groups.

Results

Sixty-five patients were included in this study. Patients expressed highest levels of concern about cost and radiation exposure associated with surveillance. Most patients (87.6%) did not express a preference for more or less frequent imaging. Younger patients were more concerned about cost of imaging than older patients, with 40% of patients under 65 years of age agreeing that they were concerned about cost versus 10% of patients 65 and over. Patients living farther from their surveillance imaging center were also more concerned about cost than those living closer to the imaging center. Female patients had higher levels of concern compared to male patients regarding need for additional tests if imaging were positive, as well as higher overall levels of concern about surveillance imaging. Positive correlations were observed between greater patient anxiety and both preference for more frequent imaging ($r_s=0.274$, $p=0.027$), and higher overall level of concern about surveillance ($r_s=0.259$, $p=0.037$). Higher negative appraisal scores were also correlated with higher overall level of concern ($r_s=0.323$; $p=0.012$).

Conclusions

In the absence of definitive, evidence-based protocols for surveillance after sarcoma treatment, individual physicians often determine the frequency and modality of imaging. The Sarcoma Surveillance Survey may be a useful tool for eliciting patient concerns about surveillance imaging and, administered in conjunction with a measure of anxiety, can help identify patients who may be struggling with emotional distress over the course of surveillance. Identifying patients with greater concerns and anxiety regarding surveillance imaging may help patients and providers choose between high- and low-intensity surveillance protocols on an individual patient basis and create opportunities for counseling and survivorship interventions.

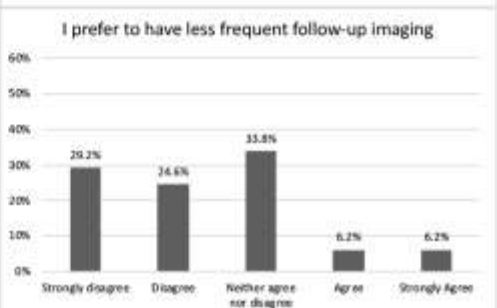
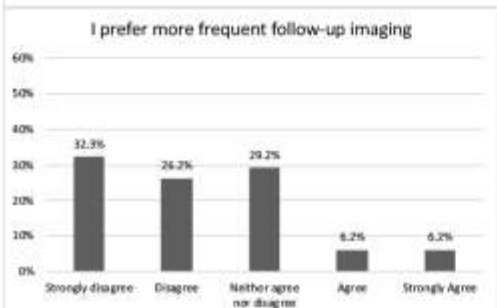
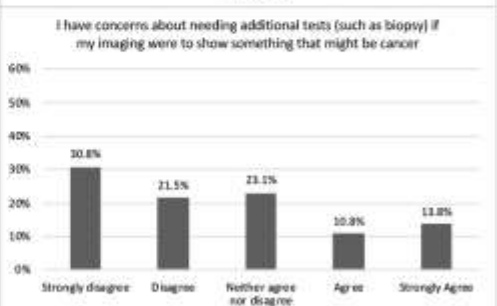
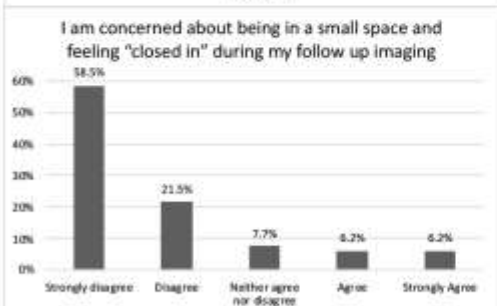
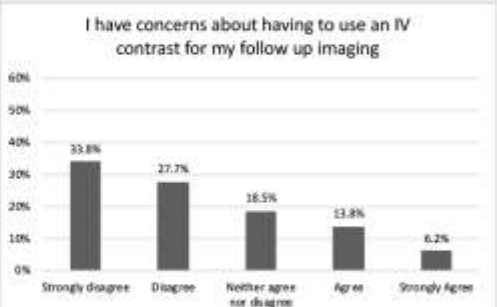
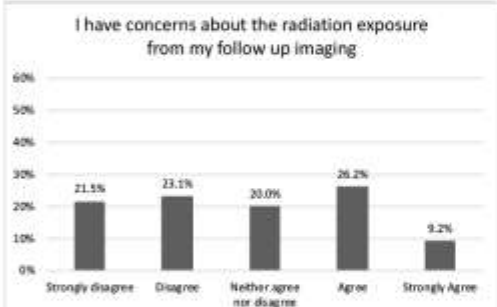
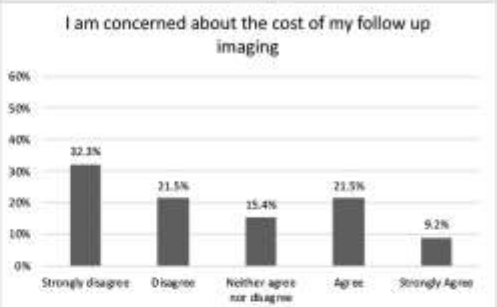
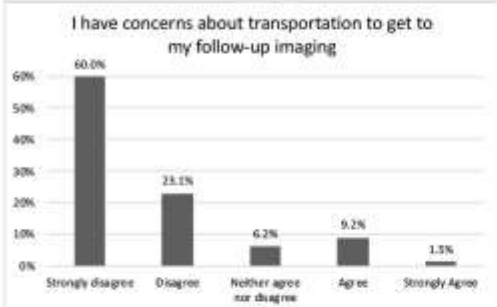
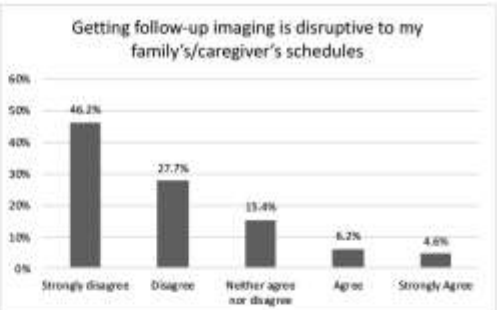
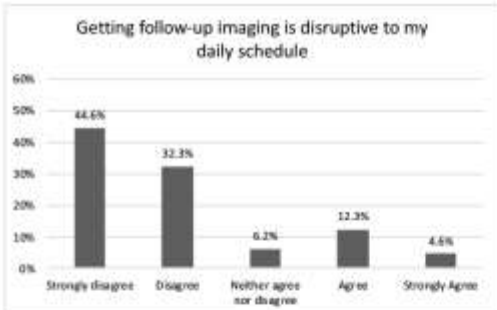


Figure 1. Patient responses to the Sarcoma Surveillance Survey questions.