9th ANNUAL DEPARTMENT OF PATHOLOGY YOUNG INVESTIGATORS’ DAY
POSTER SESSION
Thursday, April 5th, 2007
TURNER CONCOURSE
REGISTRATION FORM

E-mail COMPLETED Registration form and abstract to:
Stacey Morgan (smorgan9@jhmi.edu) on or before
Friday, March 16th, 2007

If you have questions or problems regarding your submission, please contact Stacey Morgan via e-mail (smorgan9@jhmi.edu)

Applicant’s Name:  ________Janis Taube_________ Degree:  __MD________
Applicant’s Division:  __PGY-3 Pathology Resident__________________________
Faculty Preceptor:  ________Dr. William Westra__________________________
(Must hold a primary appointment in Pathology)
Appointment Category:  ____X__ House Staff  ____Clin Fellow  ____Research Fellow
____Medical Student  ____Graduate Student (Program:______________)
Register for:  ____X__ Clinical Research  ____Translational Research  ____Basic Research

Full Poster Title *  Impact of elastic staining on the staging of peripheral lung
cancers______________________________

Where has the work been presented?
Meeting Name  __American Society for Clinical Pathology_____________________
Meeting Date  __October 18-22, 2006________________________
Not Previously Presented  ________________________________

Where is this work being published?  __American Journal of Surgical Pathology_________
Journal Name, Volume, Page, Date  _____________In Press_____________________
In Preparation  ____________________________________________

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Impact of elastic staining on the staging of peripheral lung cancers

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Abstract

Background: Accurate staging of lung cancer has a profound impact on patient management. For stage I non-small cell lung carcinomas (NSCLC), the absence (stage IA) or presence (stage IB) of visceral pleural invasion (VPI) represents a critical therapeutic branch point: patients with stage IB NSCLC benefit from adjuvant chemotherapy, whereas patients with stage IA NSCLC do not. Elastic staining has been advocated as a simple method for visualizing pleural invasion. The purpose of this study was to determine whether routine elastic staining of resected peripheral NSCLCs alters tumor staging in a meaningful way.

Design: The study cases consisted of 100 consecutive peripheral NSCLCs resections that were pathologically staged as IA based on routine histologic assessment. Each case was stained with the Movats pentachrome elastic stain to aid identification of VPI. To assess current standards of surgical pathology practice, members of the American Association of Directors of Anatomic and Surgical Pathology were asked whether they never, sometimes or always order elastic stains for peripheral NSCLCs that abut the pleura.

Results: Elastic staining resulted in change in tumor stage from IA to IB in 19 (19\%) cases. Of the 49 pathologists that responded to the survey, 25 (51\%) never, 14 (29\%) sometimes, and 10 (20\%) always order an elastic stain for NSCLCs abutting the pleura.

Conclusions: Elastic staining is currently not standard surgical pathology practice for the evaluation of peripheral NSCLCs, but it should be. Invasion of the pleura is an elusive finding that is best appreciated with an elastic stain. In the absence of routine elastic staining, standard histopathologic evaluation underestimates the extent of tumor spread resulting in inaccurate tumor staging and, in turn, suboptimal patient management.