

10th ANNUAL DEPARTMENT OF PATHOLOGY YOUNG INVESTIGATORS' DAY
POSTER SESSION

POSTER #

36

(for Admin. use)

Thursday, April 17th, 2008
TURNER CONCOURSE
REGISTRATION FORM

Applicant's Name: Joseph Maleszewski Degree: M.D.

Applicant's Division: Cardiovascular Pathology

Faculty Preceptor: Marc K. Halushka, M.D., Ph.D.
(Must hold a primary appointment in Pathology)

Appointment Category: House Staff Clin Fellow Research Fellow
 Medical Student Graduate Student (Program: _____)

Register for: Clinical Research Translational Research Basic Research

Full Poster Title * Histopathologic Findings in Ascending Aortas from Individuals
With Loeys-Dietz Syndrome

Where has the work been presented?

Meeting Name The USCAP Annual Meeting 2008

Meeting Date March 1, 2008 – March 2, 2008

Not Previously Presented _____

Where is this work being published? _____

Journal Name, Volume, Page, Date _____

In Preparation (Y/N) - Where? _____

Author(s) (First & Last) Maleszewski, J.J. & Halushka, M.K.

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***INCLUDE A ONE-PAGE ABSTRACT (including title and all authors) OF THE WORK YOU WILL BE PRESENTING**

**E-mail COMPLETED Registration form and abstract to:
Stacey Morgan (smorgan9@jhmi.edu) on or before
Friday, March 14th, 2008**

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

Abstract

Histopathologic Findings in Ascending Aortas from Individuals with Loeys-Dietz Syndrome.

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Loeys-Dietz syndrome (LDS) is an autosomal dominant connective tissue disorder resulting from genetic mutations in the transforming growth factor beta receptors 1 and 2 (TGFB1 and TGFB2). The mutations result in a characteristic phenotype as well as an increased propensity for aortic dissection. Ascending aortic tissue was compared between fifteen patients with confirmed LDS, eleven patients with confirmed Marfan syndrome (MFS) and eleven control aortas to identify the range of histopathologic changes in LDS. Standard hematoxylin & eosin (H&E) and Movat pentachrome stains were performed. By H&E, LDS samples were somewhat less remarkable than the MFS samples, showing a more subtle but diffuse form of medial degeneration. Movat staining revealed increased collagen within the tunica media of the vessels of LDS patients compared to controls and, to a lesser extent, the MFS cases. Overall, the histologic findings of LDS are best appreciated with special stains to evaluate fibrosis and elastic fiber fragmentation.