INTEGRATED INTERACTIVE WEB-BASED TEACHING IN OPHTHALMOLOGY

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Introduction

At SUNY UMU, there was a great demand from students for an eye anatomy-learning module that they could utilize prior to learning about Eye Pathology. Furthermore, a great disconnect is recognized in ophthalmology and its formal curriculum from general medicine that needs to be reintegrated to benefit practicing physicians. To address these issues, we developed an interactive integrated ophthalmology teaching Website for UMU medical students, Ophthalmology residents, and Pathology residents. The teaching/learning modules in the website use tutorial and case-based approaches to integrate anatomic, physiologic, and clinical information.

Summary

Teaching eye pathology has traditionally relied on the use of microscopic glass slides with assistance from an instructor and an atlas. The department of eye pathology at SUNY UMU has accumulated and extensive image collection over 45 years which form the basis of this project. We developed an interactive Website using FileMaker Pro (FileMaker Inc, Santa Clara, CA 95054) for database creation and JavaScript/HTML to develop the web-page output. Images from glass slides and Kodachromes have been digitized with a Nikon scanner and touched-up using Photoshop (Adobe Photoshop 7.0). For each block of teaching, there are available introductory tutorials where anatomy, histology, and pathophysiology of the eye and commonly encountered diseases are delineated. In the case based modules, each case begins with a clinical history and clinical images as may be encountered by the student or resident. As the users continue through the case, they encounter microscopic and macroscopic images for evaluation, which are associated with questions that guide the learner to a final diagnosis. With simple clicks of the mouse, the learner views thumbnail images that they may view at high magnification if desired. The module is password protected. A future goal is for our faculty and students to submit their cases for possible sharing on the web within SUNY UMU. Ref: http://pathed.upstate.edu:8080/gi_liver05/frame.htm

Benefits Of Attending Session

Participants will learn from demonstration:

1. How to develop Web-based templates for data entry into a database.
2. How to retrieve information from a database for Web display.
3. An additional approach to teaching ophthalmology and eye pathology using self-directed case study modules.

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