CASE-BASED RENAL PATHOLOGY EXERCISES: A WEB-BASED MODULE AS A VEHICLE FOR INDEPENDENT LEARNING

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We design a web-based delivery of question-focused content on renal pathology to complement and enhance didactic teaching and to engage the learner. The integration of authentic clinical data and textbook information in a self-paced, interactive environment facilitates independent learning by students, affording them a greater opportunity to construct their own understandings and more responsibility over their own learning processes.

The database-driven module, an updated addition to our Pathology Course Website developed in 1998 consists of clinical cases likely encountered on nephrology rounds. It is created using FileMaker Pro with database search, storage, retrieval and image incorporation functions, and a built-in interface for display of database contents on customized Web templates written in HTML, CDML and JavaScript. To direct students’ thinking to the issues raised, case histories are followed by questions, comments and relevant thumbnails that zoom into full-sized annotated images. A reference section containing lists of diseases and/or diagnoses from which students make selections as answers to the questions. Deadlines are specified for the completion and submission of responses. Students’ answers are automatically graded, tabulated and recorded in the database along with the date and time of submission.

Evaluation results from students were enthusiastic, particularly for the ease of navigation and utilization of directed questions as a mechanism for gauging their understanding of the subject matter.

Benefit in Attending Session:
Participants will learn from this presentation:

• Elements that promote independent learning.
• How to setup a database-driven Website.
• Educational value of student participation in the learning process.