Virtual Microscopy New, Old, Out, Or Just A Part Of Education

I. Klemper*, K. Jöhrens

*Institute of Pathology, Charité, Berlin, Germany, Institute of pathology, Charité, Berlin, Germany

Introduction/ Background

More than six years ago – accompanying the start of the new study program “Modellstudiengang” – we began a virtual microscopy program for our students. This started with slides to accompany the course to use during the lesson and for review of the slides at home (or in the library). But we wanted to go further. How far have we come?

Aims

Our aim was to provide our students with more beneficial information and to increase the amount of material available in the form of slides and accompanying exercises. A secondary goal was streamlining the education of our students (fewer slides to manage and better opportunities for students to prepare for lessons).

Methods

The slides were scanned using NanoZoomer 2.0-HT slide scanner. The virtual slides were made available to students using Slidebox system (version 4.4.3.) in three different ways: We provided annotated slides with healthy (physiological) and diseased (pathological) samples to accompany the entire course. Some of the slides were for use during lessons, others as supplementary material.

1. The virtual slides were integrated into a new style of lecture (“blended learning”) mixing learning opportunities from case reports, including clinical information; radiological images; and virtual slides. To review acquired knowledge memory-quizzes were used.

2. We complement the cases seen in the practical course “Autopsy – How, why, to what end?” with histology. Thus students are able to have a complete overview of the case from clinical history, to macroscopic findings and their correlation with the microscopic findings, to the final report.

Results

Usually the students were surprised, when they first come in contact with the virtual microscopy. But the initial surprise yields to experimentation and getting used to it. Virtual microscopy is not only just a part, but an important part of our education.