

TEACHING THE NEUROANATOMICAL BASIS OF NEUROLOGIC DISEASE USING NEURO VIDEO CLINIC, A VIDEO-BASED APPLICATION DEVELOPED USING FLASH AND LIVE STAGE

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The first step in making a neurological diagnosis is to determine where in the nervous system a lesion has occurred. This skill requires having mastered fundamental principles of neural pathway organization and the ability to associate that knowledge with physical signs of nervous system disorder. Historically, the preferred method of teaching this skill has been demonstration using live patients, or analog recordings of patients, followed by descriptions of neural pathway structure and function. Unfortunately, live presentations and VHS recordings do not easily provide on-demand review by students. Consequently, several groups have recently set about to produce digital source video collections of normal and abnormal neurological physical signs with the intent of providing them for free distribution and use in health related curricula. The objective of the present demonstration is to show how we incorporated patient videos into our introductory Medical Neuroscience course to teach the neuroanatomical basis of neurological disorders. We will demonstrate (1) how we integrated patient videos, pathway schematics, photomicrographs and animations, and text files in a Flash/Live Stage Pro interactive application called Neuro Video Clinic, and (2) how we incorporated patient videos into our course examinations to test clinical skills in our introductory level course. In the process we hope to open dialog concerning the most effective use of digital patient recordings in a health science curriculum. On the basis of student evaluations and exam performance, we propose that our use of video examples made the course material more interesting and improved their learning effectiveness.