

ECG MADE SIMPLE – A NEW PARADIGM FOR TEACHING ECG

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Introduction

“ECG Made simple” is an innovative educational software in teaching the art and science of electrocardiogram (ECG) interpretation to undergraduate medical students, those in post-graduate medical training, and practicing physicians who need a refresher. We utilized Flash animations extensively to illustrate the often difficult to explain time-based concepts inherent in ECG understanding. The quiz function of Authorware was used to provide stepwise interpretation guidance which supplemented the current lack of interactive teaching in ECG.

Abstract

ECG interpretation is a fundamental clinical skill of any practicing clinician. However, the teaching of ECG interpretation to medical students and residents has been traditionally spotty and unsatisfactory. This translated into medical errors despite the widespread use of computerized ECG interpretation in medical practice.

To address these problems, our team has developed a computer-based interactive ECG teaching CD-based program that addresses the learning needs of undergraduate and postgraduate students and complements the current undergraduate seminars at University of Toronto. This program provides basic information and teaches the student a consistent and logical approach to ECG interpretation. The program contains a selected collection of ECGs for interactive practice. During the practice, students are helped to correct their errors and encouraged to improve their knowledge by supplying them with links to relevant information.

For evaluation purposes, we have employed an iterative cycle of development method with multiple evaluations with our target audience at different stages of development. We used the comments from our target users and feed them back into our development cycle.