THE NEW K2 Simulator

Quick Help Guide

CTG Training Simulator Version 2.0

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Quick Help Guide - Training System New Simulator 2.0

This guide is designed to help you understand the new features and additions made to the Fetal Monitoring Training System's CTG Simulator. The new simulator has a number of changes that better reflect clinical practice. It also incorporates INFANT® technology and embraces NICE guidelines.

There are two modes:
Training Mode:

Training mode uses the patented INFANT™ Algorithm to provide immediate feedback on its interpretation of the fetal condition. After a CTG segment labour management decision has been made immediate expert feedback is provided. At the end of the case, feedback is also provided on the level of agreement with both the clinical experts (who independently interpret each case) and with the INFANT System's interpretation.

Assessment Mode

7 days after reviewing a case in training mode it can be revisited in assessment mode. In this mode INFANT feedback is not provided, but at the end of the case INFANT and clinical expert feedback are displayed.

Using the Training System New Simulator 2.0

The steps to using the new simulator are very simple:

1. Select the case to be reviewed from the file tab and click 'Load Case File'. Fig 1

Fig.1

2. Click the 'Case Notes' tab to reveal the patient notes. Fig 2

Fig.2

3. Click the CTG Tab and the trace will appear. This screen also displays the INFANT Concern Ladder which is explained in more detail later in this guide. Fig 3
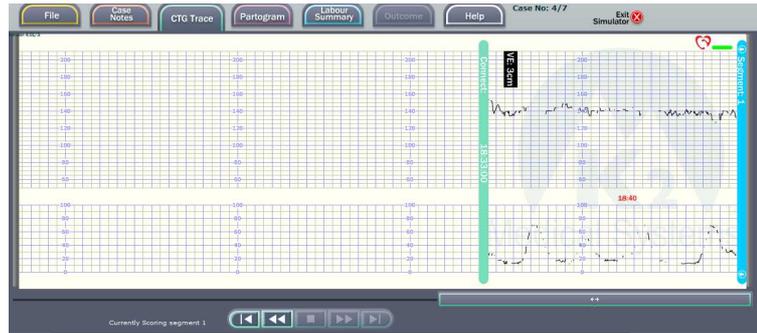

Fig.3

a. At the bottom of this screen is a section where the CTG classification details are entered. Fig 4

Fig.4

Click on the relevant range or feature in each column.

b. Click on the management bar at the bottom of the screen (above) to display the following. Fig 5.

Fig .5

Any number of management options can be selected.

c. Select the options that reflect your level of concern.

d. Click on the 'Next Segment' button to obtain feedback and continue to the next section.

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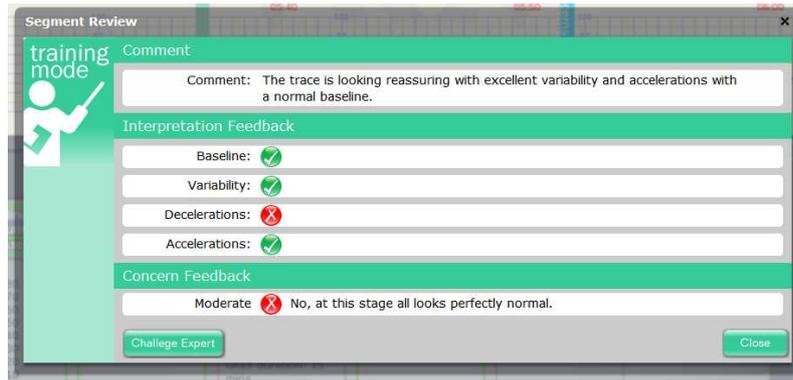
e. Feedback is then provided. Fig 6

Fig.6

Agreement with the experts is indicated by a green tick.
Disagreement with the experts is indicated by a red cross.
Supporting comments may also appear.
At this point it is possible to challenge or query the expert's opinion via email.
To move to the next segment, click on the close button.

4. Another, 15 minutes of CTG trace is revealed and the process starts again.

   Note: Your previous classification values will be retained on the screen.

5. If you decide to intervene or the end of the CTG trace is reached feedback is given at that point. Fig 7
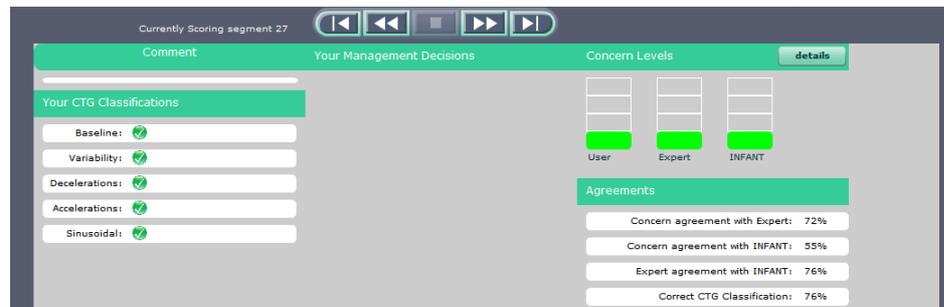

Fig.7

The agreement score compares the user's own score against both the Expert's and the INFANT Algorithm results.

NICE Classifications

Having reviewed the CTG trace and selected your chosen classifications, the overall classification in accordance with the NICE guidelines, is displayed. The NICE classification is based upon your decisions throughout the case.

What is INFANT?

INFANT is software to interpret fetal heart rate monitoring that took K2 Medical Systems over 20 years to develop. The extended development period is due to the challenging nature of CTG interpretation. On the one hand INFANT must be good at detecting problems within all manner of labour patterns and on the other hand it must not be too sensitive in that it raises unnecessary concerns. Achieving this balance is difficult for people and computer systems. INFANT analyses both the FHR and contraction pattern and alerts clinicians to potential problems in a timely manner. INFANT has been validated on databases containing several thousands of interesting, abnormal and challenging traces; it has been found to perform at the level of experts whose ability we have measured.

INFANT assesses the same CTG features that a clinical expert would. These include Baseline, Variability, Accelerations, Decelerations, Signal Quality, Contraction patterns, Pushing, Sinusoidal and Bimodal patterns. Where these parameters become abnormal they are clearly marked.

Concern Ladder

INFANT also displays a 4 level concern rating for the overall trace.

Red – Serious and Urgent concerns with CTG. Review all aspects of the labour, make a plan and document.

Yellow – Serious Concerns with the CTG. Inform senior staff. Review all aspects of the labour, make a plan and document.

Blue – Minor Concerns with the CTG. Continue to observe the trace closely, document your plan and inform senior staff where appropriate.

Green – No concerns

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