

# Avoiding CTG Misinterpretation

How many traces have you seen in your career?

How many can you remember?

The Dawes-Redman analysis remembers over 100,000!

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Dawes-Redman CTG Analysis™

...your expert eye



# Dawes-Redman CTG Analysis

"Having identified the problems with traditional CTG interpretation, and after dedicating over 35 years' on-going research with the team at Oxford University, I'm delighted to see our analysis increasingly being used worldwide in Huntleigh's products... knowing the benefit this gives in helping babies to enter the world safely & avoiding some of the tragic outcomes we see when CTG interpretation goes wrong."

Professor Chris Redman



This guide provides a brief summary of the Dawes-Redman antenatal CTG Analysis & how it can support you in every day clinical practice by providing a far more robust interpretation of CTGs than the traditional subjective opinion based process.

## What Is Dawes-Redman CTG Analysis?

It is a unique software tool which provides a numeric analysis of the CTG trace and a robust interpretation based on the worldrenowned Dawes-Redman Criteria.

This is the result of the largest study of its type ever undertaken, conducted by Professors Dawes, Redman et al, at Oxford University.

## Why Is It Needed?

Because the traditional approach of assessing a trace by eye is based on highly subjective, opinion. This has repeatedly been shown to be a major problem<sup>1</sup>.

Clinicians do not agree with one another or even themselves when assessing the same trace at different times. This is a particular problem with traces in the "grey zone" inbetween those that are clearly either normal or grossly abnormal.

This is compounded by different levels of experience, plus the fact that even the most experienced observer cannot remember the huge range of patterns and what they signify. Additionally, communication of vague opinion, such as "the trace looks a bit flat" can cause problems as this is so subjective.

## Accurate Measurement

These issues are solved by the Dawes-Redman CTG analysis.

In effect, it brings to the bedside the experience of the entire archive that has contributed to the analysis, now in excess of 100, 000 traces, replacing vague, subjective opinion with robust numeric facts.

The Dawes-Redman CTG analysis ensures consistency and relates the many patterns to outcomes in an evidence-based way.

# What Are The Benefits?



The Dawes-Redman Analysis can Save lives, Save time, Save money. Dawes-Redman analysis is unique, clinically proven and powerful. Properly adopted into local protocols, it can save time, save money & improve quality of care & outcomes.

## Improving Outcomes

Providing reassurance & supporting clinical decisions. Dawes-Redman analysis has the potential to avoid the poor outcomes associated with subjective opinion based CTG interpretation.

A tragedy for the family; it's also very distressing for the clinical team. It backs up clinical decisions & provides a robust defence. Avoiding just one poor outcome has priceless benefits.

## Increasing Efficiency

The Dawes-Redman CTG analysis can report criteria met for a normal trace in as little as 10 minutes. This reduces the time it takes to process mums through busy antenatal clinics by a factor of 3. This frees up staff, beds & equipment, taking the pressure off stretched resources & reducing costs.

Pregnancy & childbirth can be a stressful experience. Spending less time on the fetal monitor helps to make this a less stressful experience, while providing reassurance that the baby is OK, or is receiving the best care & management it needs.

For busy working mums it can also reduce the time she needs to take off work during pregnancy.

## Reducing Costs

Globally, billions are spent in obstetric litigation or on-going support costs arising from poor outcomes for the life of the individual. In 10 years, the UK spent £3.1B in obstetric litigation (half of all UK NHS litigation costs)<sup>2</sup>.

If using the Dawes-Redman CTG analysis avoids just one poor outcome it can save millions.

# What Are The Benefits?

## Complementing Your Skills

The Dawes-Redman CTG analysis is not there to take over. It's there to help make the process of understanding the CTG trace far more robust & provides a powerful defence for when things go wrong. It is also a valuable training tool.

However, it has no knowledge of other aspects of the pregnancy, risk factors, drugs, social factors, ethnic factors, etc. The trace is just one part of a very complex clinical scenario where you are managing two highly interdependent lives – one of whom you cannot communicate with or physically examine.

## A Fresh Eyes Approach

Common practice in some markets is to get a colleague to give a second opinion whenever a trace is interpreted – this is referred to as a “Fresh eyes” approach.

While this may help, it may also confuse, as this may result in two opinions instead of just one, & they may be conflicting!

## Your Expert Eye

Dawes-Redman CTG analysis can be thought of as “Fresh eyes” which give a much more robust & objective assessment.

Responsibility for the clinical management of your patient remains your responsibility at all times. This is simply giving you more reliable information on which to base your clinical judgement & provide a robust, numeric, way of communicating with colleagues.

## Reassurance You Can Rely On

Unlike humans, the Dawes-Redman analysis never gets tired, it doesn't need breaks, get sick or need holidays. It is always on hand, at the bedside, to help.



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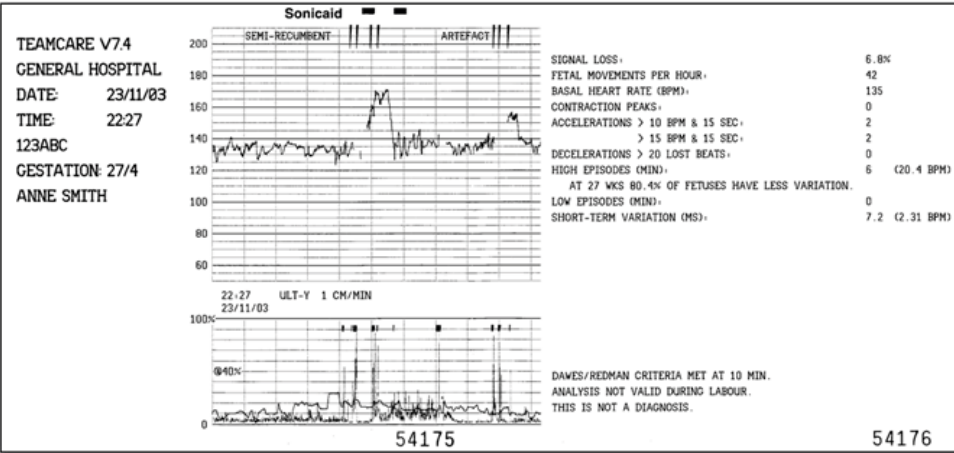
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# Dawes-Redman CTG Interpretation Pathway

Analysis Outcome	What does this mean?	What do I do?
Criteria met	Normal reactive CTG	Continue routine management
Criteria not met at <60 mins	Record too short to classify as normal features not yet identified	Continue trace until criteria met
Criteria not met at 60 mins	Non-reassuring or pathological outcome	Review full clinical scenario - manage according to local protocols for pathological trace

The analysis is for use prior to the onset of labour as an adjunct to, and not a replacement for, clinical expertise & judgement. It must be used within the context of the full clinical scenario, including visual CTG assessment. If any concern arises from visual trace assessment before 60 minutes, take appropriate action in accordance with local guidelines & protocols.

This table shows the three outcomes & what these mean in terms of pregnancy management. Additionally, the key parameters calculated by the analysis are presented – below shows a typical trace analysis report, printed at the end of the CTG trace:



# Testimonials

"The Dawes-Redman Analysis is a robust and valuable system which is used here at King's Mill Hospital on a daily basis in the antenatal day unit. We have used this system for more than 10 years and it has proved invaluable in providing midwives and clinicians with robust and objective trace information when assessing mums. It provides tremendous reassurance to myself & my team and has proved to be a vital addition to our clinical procedures & practices."

Srini Vindla  
Consultant Obstetrician

"I soon realised it's potential and benefits..... this can greatly reduce the time for women being monitored and reduce the length of their visit.....I learned from the system and rather than replace my clinical judgement it supported it.....I would recommend the fetal care system for use in any antenatal setting."

Antenatal Day  
Unit Manager  
UK

## Where can I get the Dawes-Redman CTG Analysis?

The University of Oxford has exclusively licensed its proprietary Dawes-Redman CTG Analysis software to Huntleigh & is available in a number of formats.

Our range of fetal monitors include this feature as standard\*, delivering the power of the Dawes-Redman analysis to the bedside with no added equipment, clutter or complications.

More powerful versions of the Dawes-Redman analysis are available as options in our range of CTG viewing & archiving software systems. This includes enhanced reports, added features such as graphic trends of key data through the pregnancy, electronic archiving of the analysis, along with the CTG trace, & more.

For more information on the Dawes-Redman CTG Analysis, visit our website or contact us.

### References:

1 (Bernardes et al, 1997; Devoe et al, 2000; Chauhan et al, 2008)

2 Ten Years of Maternity Claims

An Analysis of NHS Litigation Authority Data Oct 2012.

\*Market / model dependent

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**Manufactured and distributed by Huntleigh Healthcare Ltd.**  
35 Portmann Moor Road, Cardiff, CF24 5HN, United Kingdom  
T: +44 (0)29 20485885 sales@huntleigh-diagnostics.co.uk  
www.huntleigh-diagnostics.com

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ArjoHuntleigh House, Houghton Hall Business Park, Houghton Regis, Bedfordshire, LU5 5XF  
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