

ELECTRONIC FOETAL MONITORING (CARDIOTOCOGRAPHY)

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Introduction

Electronic Foetal Monitoring (EFM) involves the use of a device, the tocodynamometer that senses and records graphically, both uterine as well as foetal heart activities. It was introduced into clinical practice in the late 1960s. After its introduction, EFM was accepted rapidly in developed countries like United States and Canada. However, its widespread acceptance in obstetric practice began to be questioned in the 1980s.

Objective

The main focus of this assessment was to determine the cost-effectiveness (whether there are cheaper alternatives), the extent of utilisation in decision making and to establish current practice with respect to EFM.

Methodology

The methodology used was a review of the reports on efficacy, safety and cost effectiveness as well as the practice of EFM. The evidence showed that, EFM should be used during labour for high risk cases only. It has been agreed that EFM can at least pick up some cases of foetal distress. However, the accuracy obtained at research centres may vary from actual experience. Although initially used in labour, its use has spread to prenatal care and even to home monitoring.

In addition, a survey was conducted on current practices in use of EFM in local hospitals for one month. From the survey, it was found that there was no uniform practice in these hospitals. The expert committee then decided that an intervention be carried out, so that EFM be used only for high risk pregnancies (the high risk being categorised as in the Ministry of Health guidelines on high risk antenatal cases)

Results and Conclusions

The study found that there are still large variations in practice and patterns of usage of EFM. Looking at the distribution of EFM done, the majority of patients who had EFM done were high-risk patients. Cost considerations addressed only the amount of money spent on electrodes, paper and electrode gel during the entire study period.

Recommendation

In conclusion, it was recommended that EFM should only be carried out for intrapartum high-risk pregnancies only. Periodic auscultation of foetal heart rate is an acceptable alternative in women at low risk for foetal distress