ABSTRACT

Introduction

Perinatal outcome can be improved by timely prediction of antenatal risk factors contributing to complications, by providing appropriate antenatal surveillance. Non stress test has the capacity to identify danger to the in utero fetus, which ensures well-timed intervention in order to attain best possible outcome.

Aim of the study:

To evaluate the role of NST in high risk pregnancy with relation to perinatal outcome.

Materials and methods

The study was carried out in the Department of OBG, Sree Mookambika Institute of Medical Sciences, Kulasekharam over a period of 16 months. OPD Patients from Obstetrics and Gynecology department were included in the study. After thorough clinical examination, patients were subjected to NST. Clinical and NST data from the study was recorded as per the proforma.

Result:

In high risk pregnant women, it was noticed that there was more fetal distress compare to normal pregnant women. The high risk group had a higher value of non-stress test compare to low risk group. There is high association between NST and low APGAR score at 5 min. Most common, indication for LSCS was fetal distress followed by GDM in High risk group, but previous LSCS in low risk group.
Elderly primi was the commonest risk factor.

**Discussion:**

The present study was conducted on 92 singleton pregnancies with and without risk factors and evaluated with NST. Reactive is when there are at least 2 accelerations of fifteen heart beats per minute for at least fifteen seconds above the baseline, within twenty minutes, observation time. The criterion for fetuses less than 32 weeks is different; at least 2 accelerations from baseline rate of ten heart beats per minute for at least ten seconds within twenty minutes.

The time gap for repeating non stress test is seven days, on an average for high risk pregnancy at 35 weeks, but more frequent testing is advocated for women with post-term pregnancy, multiple gestation, patients with gestational diabetes mellitus, intrauterine fetal growth restriction or gestational hypertension. In these cases, additional testing, biweekly or more is indicated.

**Conclusion:**

NST is simple, cheap, non-harmful, non-invasive, easily repeated, and cost effective with low maintenance profile and needs less training. It plays a crucial role in the monitoring of high risk pregnancies and henceforth, help to evaluate the optimal time for delivery and management.

**Key words:** High risk group, low risk group, perinatal outcome, NST.