

Introduction

Recurrent miscarriage, which is defined as three or more consecutive miscarriages before the 24th week of gestation affects 0.5–1% of couples. By studying uterine artery blood flow using Doppler ultrasound, elevated uterine resistance is associated with recurrent pregnancy loss. Nifedipine is a calcium channel blocker which decreases peripheral artery vascular resistance.

Results

The uterine arterial blood flow indices has decreased significantly after 24 weeks of nifedipine and at 12 and 24 weeks of pregnancy with statistically significant difference with control group ($p < 0.05$).

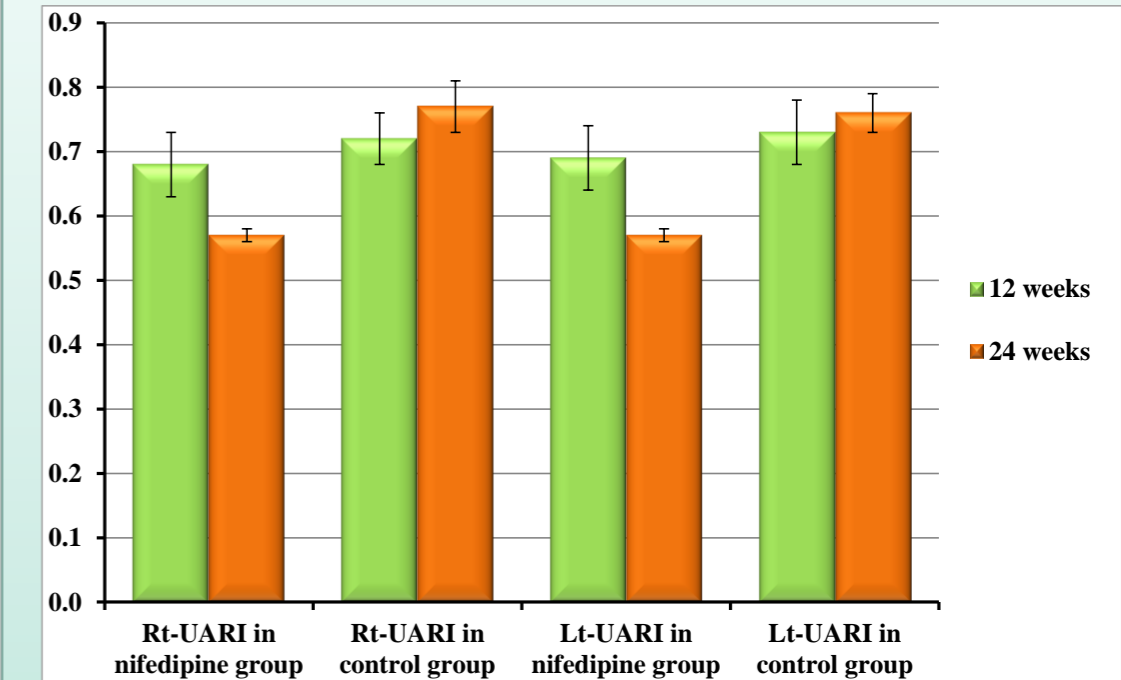


Figure 2: Doppler resistance index of uterine artery at 12 and 24 weeks of pregnancy among both groups

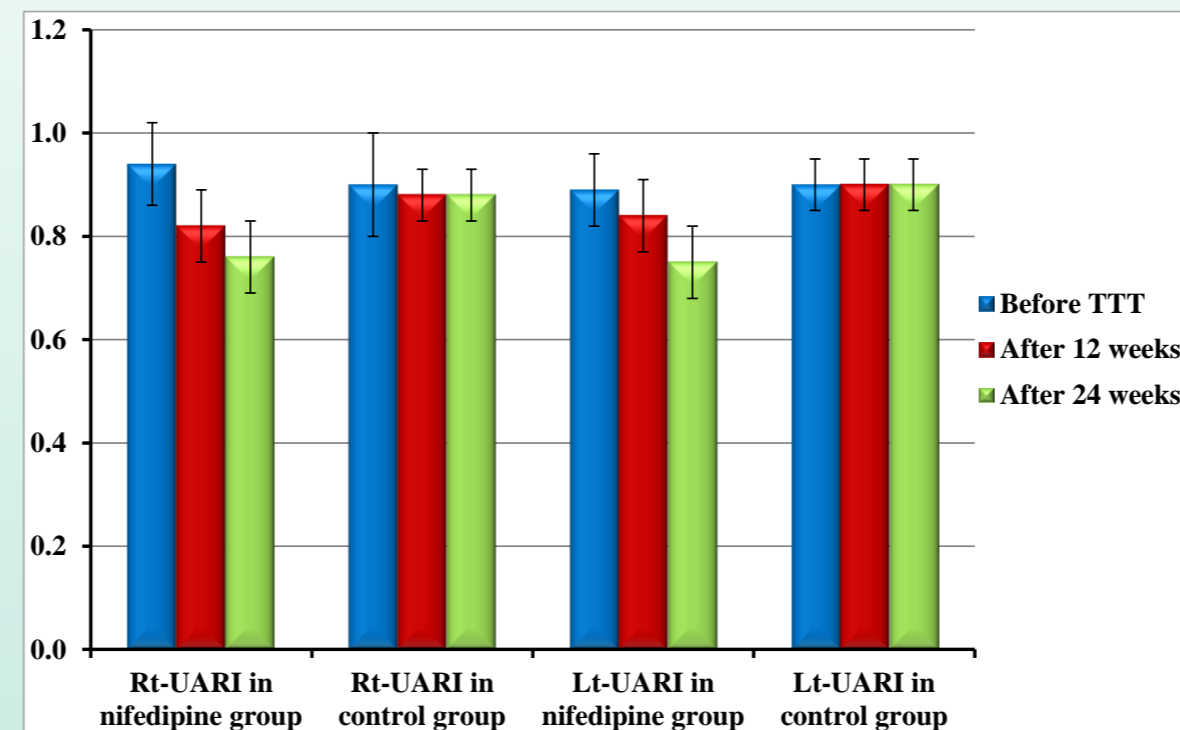


Figure 1: Doppler resistance index of uterine artery before and after treatment among both groups

Aim of the work

The main aim of this study was to assess the effect of nifedipine in improving uterine artery Doppler parameters during the luteal phase, prior to pregnancy and the enhancement of pregnancy outcome in patients with recurrent miscarriage.

Conclusion

Using nifedipine during the luteal phase, prior to pregnancy, might improve both uterine artery Doppler parameters and pregnancy outcome in patients with recurrent miscarriage.

Subjects and Methods

This prospective randomized clinical trial was conducted on 50 women, 25 as intervention group (nifedipine group) and 25 as placebo group, were recruited from EL-Shatby university hospital and private centers after fulfilling the inclusion and exclusion criteria. The duration of the study was performed from November 2020 to January 2022.