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Pregnancy outcomes in women who had Arabin pessary for prevention of PTL

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INTRODUCTION

Preterm labour defined as delivery before 37 weeks. Preterm birth Figure 1. is the single biggest cause of neonatal mortality and morbidity in the UK. It is estimated that 60,000 babies are born prematurely in the UK every year. At the University Hospital of North Midlands (UHNM) there is a dedicated antenatal preterm clinic to manage women at risk and offer them the options of expectant management versus interventional management in the form of prophylactic cerclage, Arabin pessary and progesterone. The aim of the current project was to evaluate our current preterm specialised service that we offer to our high risk pregnant women who are at risk of preterm labour and who had agreed to use prophylactic Arabin pessary with administration of vaginal progesterone.

The 'Arabin' cervical pessary Figure 1. has been developed to treat women with a short cervix to reduce the chance of going into preterm labour . It Consists of high-quality silicone. It is elastic and can be folded and thus be inserted vaginally without pain. It is not meant to close the cervix but rather to support it to prevent it from shortening and then dilating. It sits at the top of the vagina and is moved into place so that the cervix sits inside it.



Figure 1. Arabin pessary.

Methods and materials

This was a service evaluation project of our specialised prem prevention clinic. Out of 376 patients attended to the clinic over a period of 3 years, we identified 60 patients who had used prophylactic Arabian pessary and vaginal progesterone. Maternity case notes and database were reviewed. We identified high risk subjects were offered serial transvaginal cervical scans from 16 weeks gestation every 2 weeks until 24 weeks . The 3rd centile was used as the cut-off for cervical shortening . On detection of cervical shortening, Arabian pessary was inserted alongside with daily 400mg Cyclogest vaginal pessary.

The patients were followed up with serial growth scans from 26 weeks gestation and the Arabian pessary was electively removed after 35 weeks gestation with stopping of the vaginal Cyclogest to await labour events.

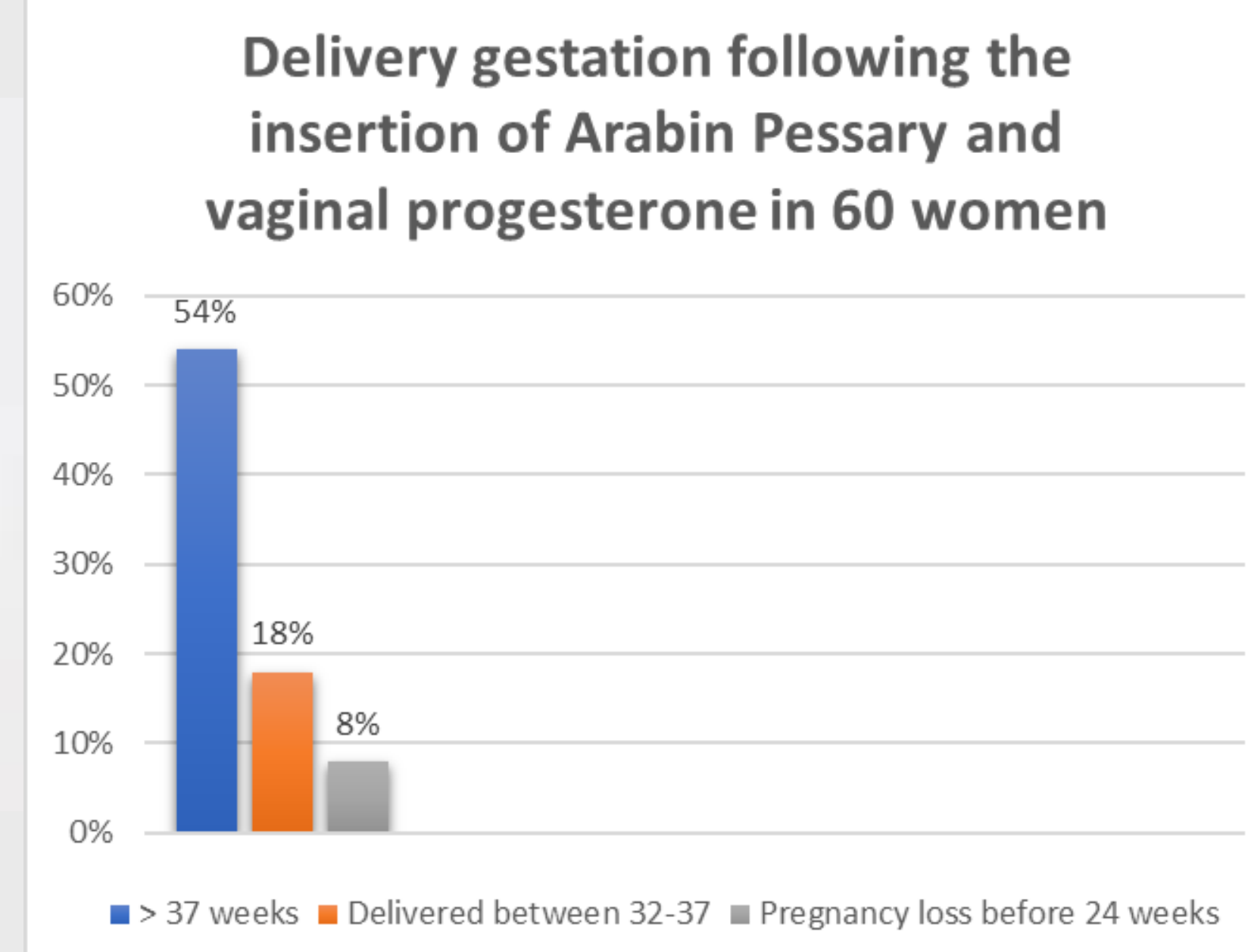


Figure 2. Results.

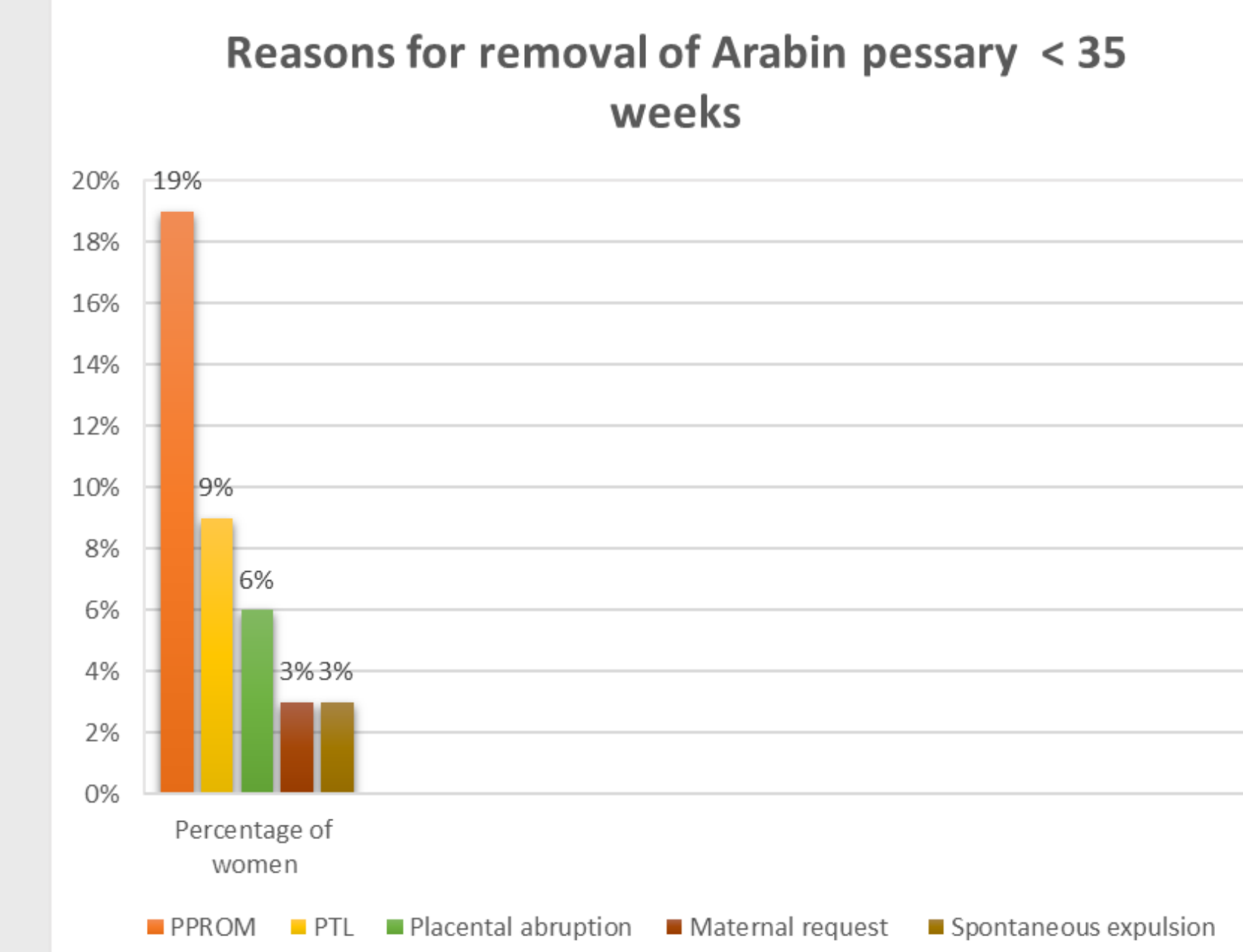


Figure 3 Results

Results

Out of the 60 women who had this treatment modality we found that 35/60 60% had an elective removal of the Arabian pessary as planned at 35/40. Removal of Arabian pessary before 35 weeks was carried for premature rupture of membranes (PPROM) (11/60, 19%), preterm labour (5/60, 9%), placental abruption (3/60, 6%), and maternal request (2/60 3%) spontaneous expulsion occurred in two cases (3%).

The majority of women delivered after 37 weeks gestation (54%), however, 18% delivered between 32-37 weeks and 17% between 24-32 weeks. Unfortunately, 5/60 (8%) had pregnancy loss before 24 weeks Figure 2.

CONCLUSIONS

Prophylactic Arabian pessary and vaginal progesterone may have a role in preventing preterm deliveries and it was well tolerated by our patients. Further work is required to identify women at risk of failure of treatment and early delivery or pregnancy loss . A randomised controlled trials with large sample size are needed to provide robust evidence

REFERENCES

1. Use of the Arabin pessary in women at high risk for preterm birth: long-term experience at a single tertiary center in Malaysia .Rahana Abd Rahman, Ixora Kamisan Atan, Anizah Ali, Aida Mohd Kalok, Nor Azlin Mohamed Ismail, Zaleha Abdullah Mahdy & Shuhaila Ahmad
2. Arabin cervical pessary in women at high risk of preterm birth: a magnetic resonance imaging observational follow-up study M. Cannie,O. Dobrescu,L. Gucciardo,B. Strizek,S. Ziane,E. Sakkas,F. Schoonjans,L. Divano,J. C. Jan
3. Preterm labour and birth
NICE guideline [NG25]Published: 20 November 2015 Last updated: 02 August 2019