

Preterm birth prevention clinic outcomes

The clinic can improve outcomes in pregnancy by focusing on high-risk cases

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Aim

To evaluate the outcomes on rates of preterm births before 34 weeks, with a dedicated preterm prevention clinic, over the period of 1 year.



Background

Our Trust operates across two hospital sites, serving a diverse population in South London and Surrey, with annual births ranging from 3,900 to 4,400. Epsom Hospital has a Level 1 Special Care Unit, while St Helier Hospital houses a Level 2 Local Neonatal Unit. The Preterm Birth Prevention Clinic was established to reduce preterm births before 34 weeks by offering targeted screening and intervention for high-risk pregnancies.

Method

At the booking of pregnancy, all women had a medical history-based screening for risk of preterm birth (PTB). Based on individual patients' history, the protocol offered either a single cervical (cx) length assessment at 20 weeks, or serial assessments between 12-22 weeks. Some were offered vaginal progesterone based on history for risk reduction.

Referral criteria for the clinic:

1. Previous cervical surgery.
2. Late miscarriage.
3. Cervical shortening on other examination (less than 25mm).
4. Previous preterm rupture of membranes and/or previous preterm delivery.
5. Uterine anomaly/structural defect.

All data was prospectively collected in a database which included maternal characteristics, previous obstetric history, screening results, treatment offered and the pregnancy outcomes.

Patient cohort overview

- 280** patients referred
- 57%** referral reason was a previous LLETZ procedure
- 19%** of patients had a single scan assessment
- 81%** of patients had multiple scan assessment



Interventions offered

- 1.8%** offered cervical cerclage based on history
- 0.7%** offered cervical cerclage for evidence of shortening
- 2.5%** Preterm pre-labour rupture of membranes (PPROM) incidence



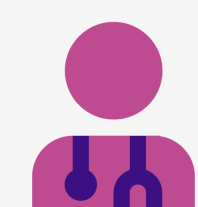
Outcomes

- 0.36%** PPRM and cervical cerclage
- 2.5%** PPRM without cervical cerclage
- 10%** birth between 23-36 weeks



Preterm birth and progesterone

- 4%** birth before 34 weeks
- 2.1%** cervical shortening despite use of progesterone



Results

18/280 (6.43%) had late miscarriages and 5/280 (1.79%) had a repeat late miscarriage.

LLETZ procedure as a risk factor: 98% of patients referred with a previous x1 or more LLETZ had a subsequent term delivery. Only 2% of these patients had a preterm delivery before 36 weeks.

Conclusion: Risk Reduction: - 32/280 (11.43%) of patients had a preterm delivery and 10 patients (3.57%) had a subsequent preterm delivery.

Conclusions

The clinic can improve outcomes in pregnancy by focussing on high-risk cases. A predefined protocol allows for the clinic to run with indirect supervision.

Changes made since review of service outcomes:

1. Changes to referrals made to the preterm birth clinic protocol include: Patients are only referred if they had a delivery or preterm rupture of membranes prior to 34 weeks. Above 34 weeks does not require cx length screening.
2. Requested information from colposcopy clinics performed within our hospitals to include the amount of cervical tissue removed at each procedure. This will help to research the impact of cervical surgery on preterm birth further.
3. All obstetric trainee registrars are being trained to perform cervical length transvaginal ultrasound to ensure accurate assessment of threatened preterm labour.