

# Pregnancy Outcome for Membrane Rupture Before 24 Weeks Gestational Age

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## Introduction

- Fetal membranes surround and protect a developing fetus and usually rupture during labour.
- Preterm Premature Rupture of Membranes (PPROM): membranes rupture prior to 37 weeks gestation in the absence of regular, painful contractions<sup>1</sup>.
- PPROM <24 weeks is associated with an increased risk of ascending infection and poor lung growth. Termination of pregnancy (TOP) is often explored, and sometimes recommended, when counselling these patients.

#### **Aims**

- To assess the contemporary outcomes for PPROM before 24 weeks to determine whether the approach currently taken by clinicians is appropriate
- Main outcome measure: neonatal survival up to one year of age
- Termination of pregnancy considered as a separate outcome

## Methodology

The RMSO has recorded all fetal loss from 20 weeks gestation and all postnatal deaths up to one year of age since 1984 on the PMFA database.

- **Design**: Retrospective study. Cases identified using fetal medicine unit (FMU) database and cross-checked with the PMFA database to obtain data. Data analysed as a whole and as two subgroups; PPROM <20 weeks and 20-24 weeks gestation.
- Data: Pregnancy outcome. X<sup>2</sup> test (p<0.05 significant)</li>
- Inclusion criteria: Patients with single pregnancies who experienced PPROM <24 weeks gestation seen at FMU between March 2000 and December 2011 with no history of an invasive procedure

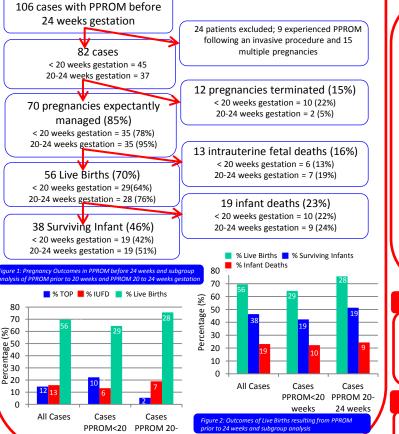
## Results

#### **Overall survival rate: 46%**

weeks

24 weeks

- Recent literature suggests that termination rate has no impact on the pregnancy outcomes in PPROM <24 weeks gestation<sup>2</sup>. Survival rate excluding TOPs is 54%
- 67% of the live births survived to over a year of age.
- Subgroup analysis: The two groups had a significantly different rate of TOP; 22% for PPROM <20 weeks gestation compared with 5% for PPROM 20-24 weeks gestation ,respectively (p=0.03). The rate of intrauterine fetal deaths (IUFDs), infant deaths, live births and surviving infants for the two subgroups were not significantly different.





## Conclusions

- 70% of pregnancies affected by PPROM prior to 24 weeks gestation resulted in live births
- Two thirds of these live births survived to over a year of age.

The outcome for PPROM <20 weeks seems no

- Better prognosis than reported in similar literature<sup>3</sup>.
- worse than PPROM <24 weeks gestation, so a more pessimistic view of women with earlier PPROM seems unjustified, but more terminations were performed for PPROM <20 weeks.
- This study is relevant o NHS clinicians because it was carried out in England over an eleven year period with a comparatively large sample size.

Limitations: the study was retrospective rather than prospective; the sample was from a tertiary centre rather than a population; only limited data availability for analysis morbidity in survivors

#### References

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