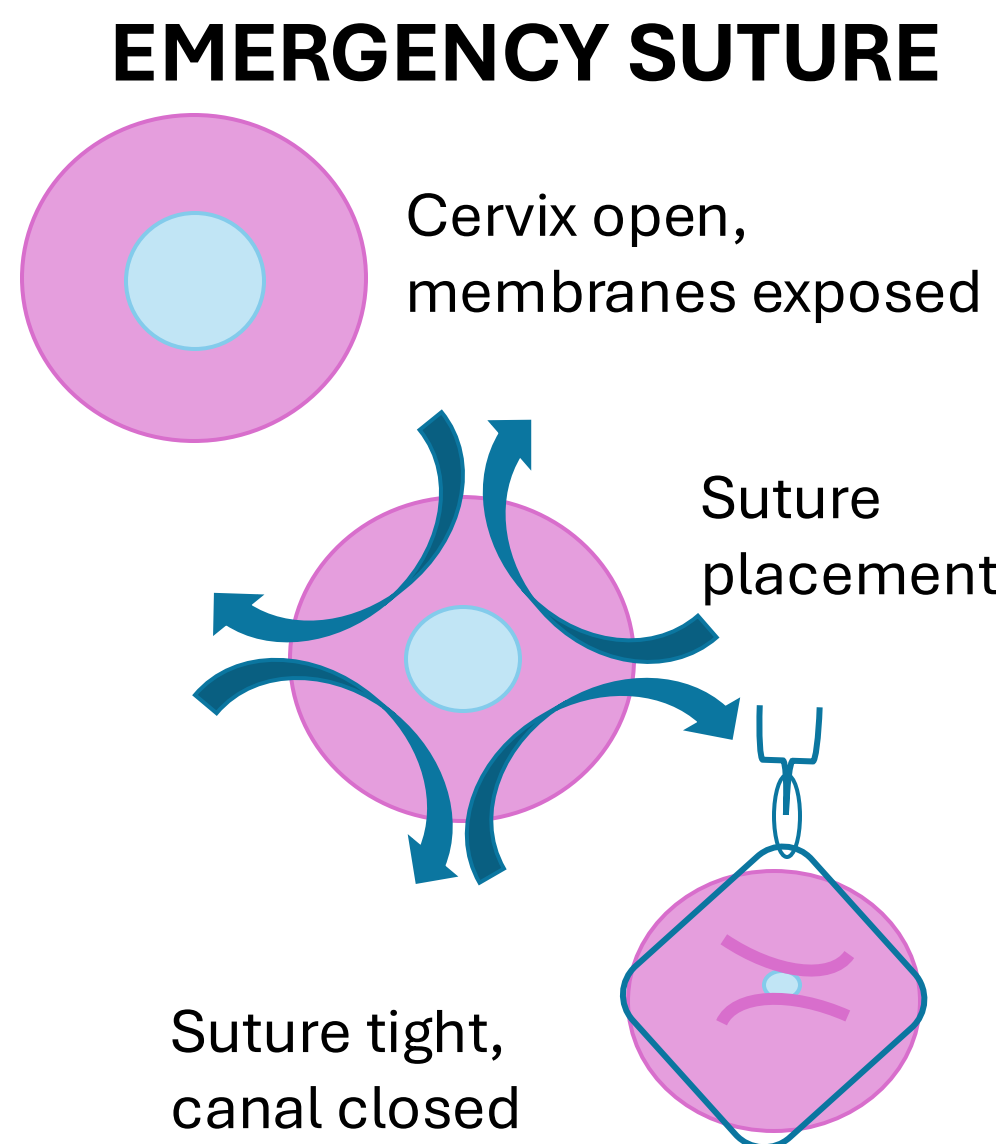


BACKGROUND AND OBJECTIVE

An emergency cervical suture is placed to mechanically support the cervix in women at risk of mid-trimester loss when the membranes are exposed. Compared with elective placement there is a higher risk of failure, membrane rupture and infection, especially when dilatation is more than 4cm, and membranes or fetal parts are prolapsing.



The RCOG cervical cerclage guideline quotes average pregnancy continuation of 34 days compared with expectant management. When used prior to 20 weeks, there is still a high chance of preterm birth before 28 weeks. Suture may not be justified after 24 weeks due to risk of iatrogenic membrane rupture, although upper gestation per NICE guidance is 27+6.

The aim of this study was to identify outcomes for women and babies undergoing emergency cervical sutures in our unit. Local guidance is for use between 16 and 23+6.

DESIGN

This is a retrospective case series of women undergoing emergency cervical suture at University Hospitals Dorset in 2023 and 2024.

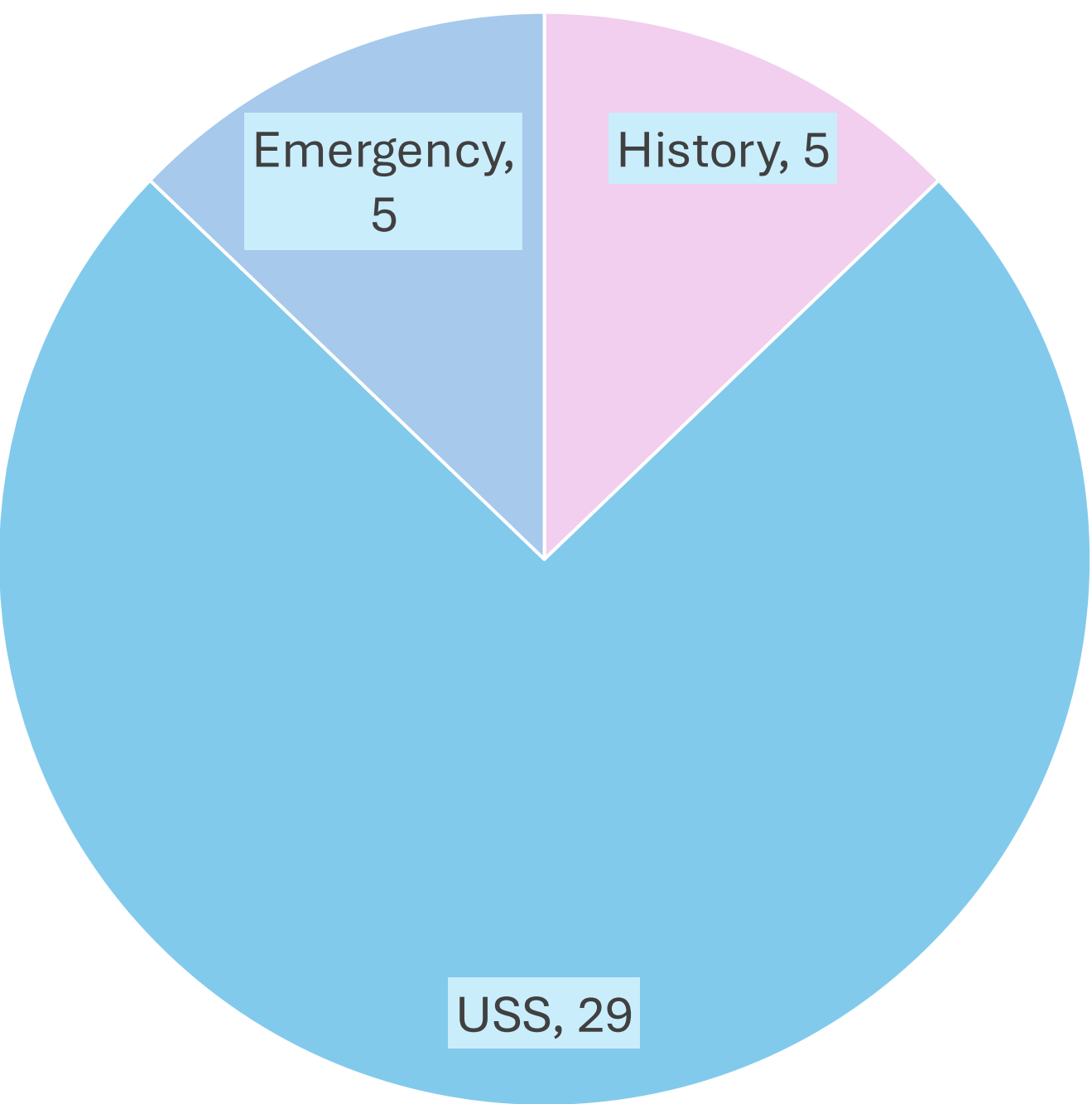
METHOD

The cases were identified by cross-referencing “Caesarean Diary” database for cervical suture insertion, and Badgernet unit reports of “WHO checklist completion” with subcategory “cervical suture”. 39 cases were identified, and each patient's operation note reviewed for suture type. The 5 emergency suture cases were then reviewed in detail using Badgernet notes.

RESULTS

39 sutures at UHD between 2023 and 2024

SUTURE INDICATION BREAKDOWN



EMERGENCY SUTURE CASES

- None met referral criteria for preterm birth clinic prior to presentation
- Several potential risk factors for preterm birth (italicised in demographics of timelines)
- Every case had bulging membranes at the time of suture insertion.

WEEKS

16+1

16+3

17+4

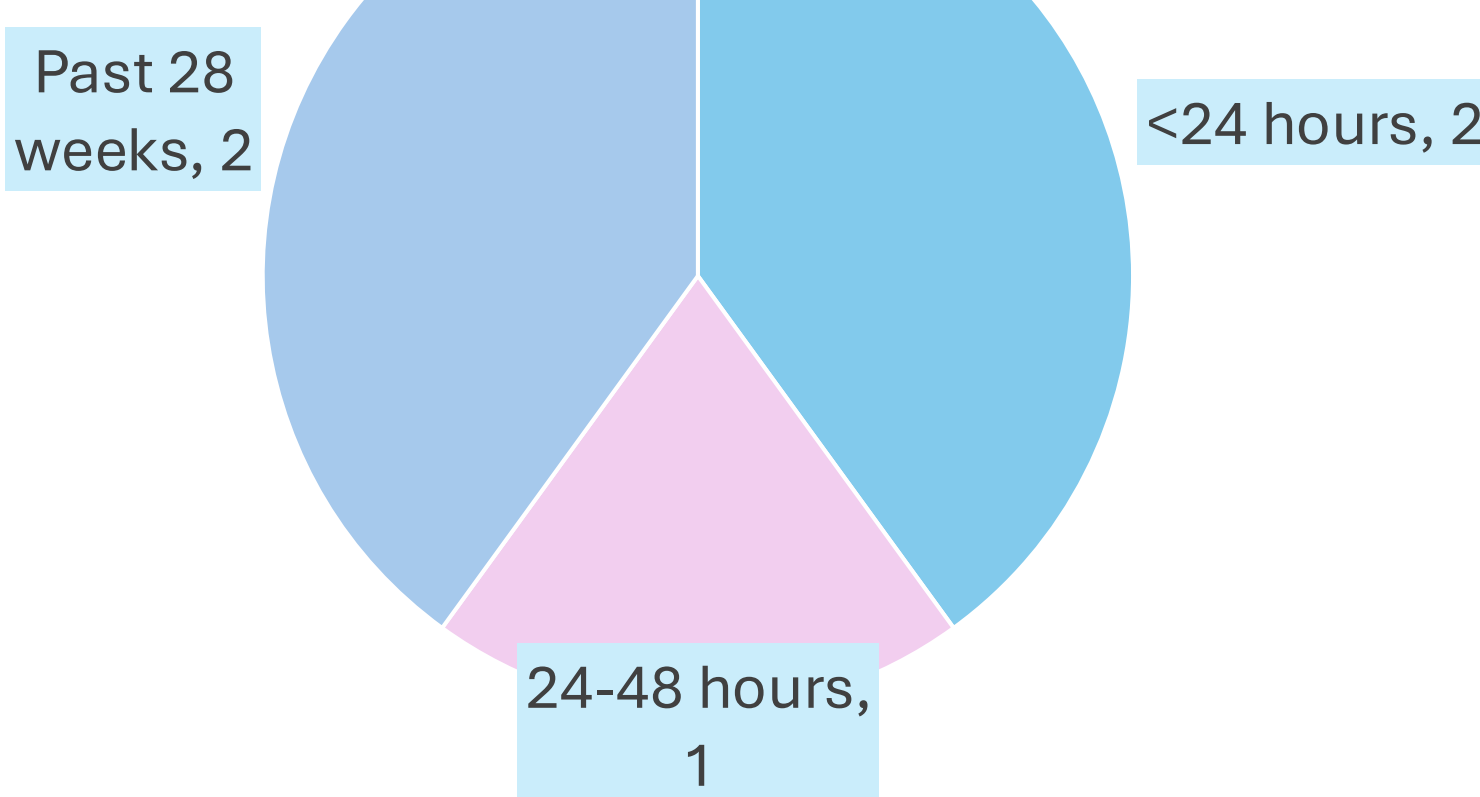
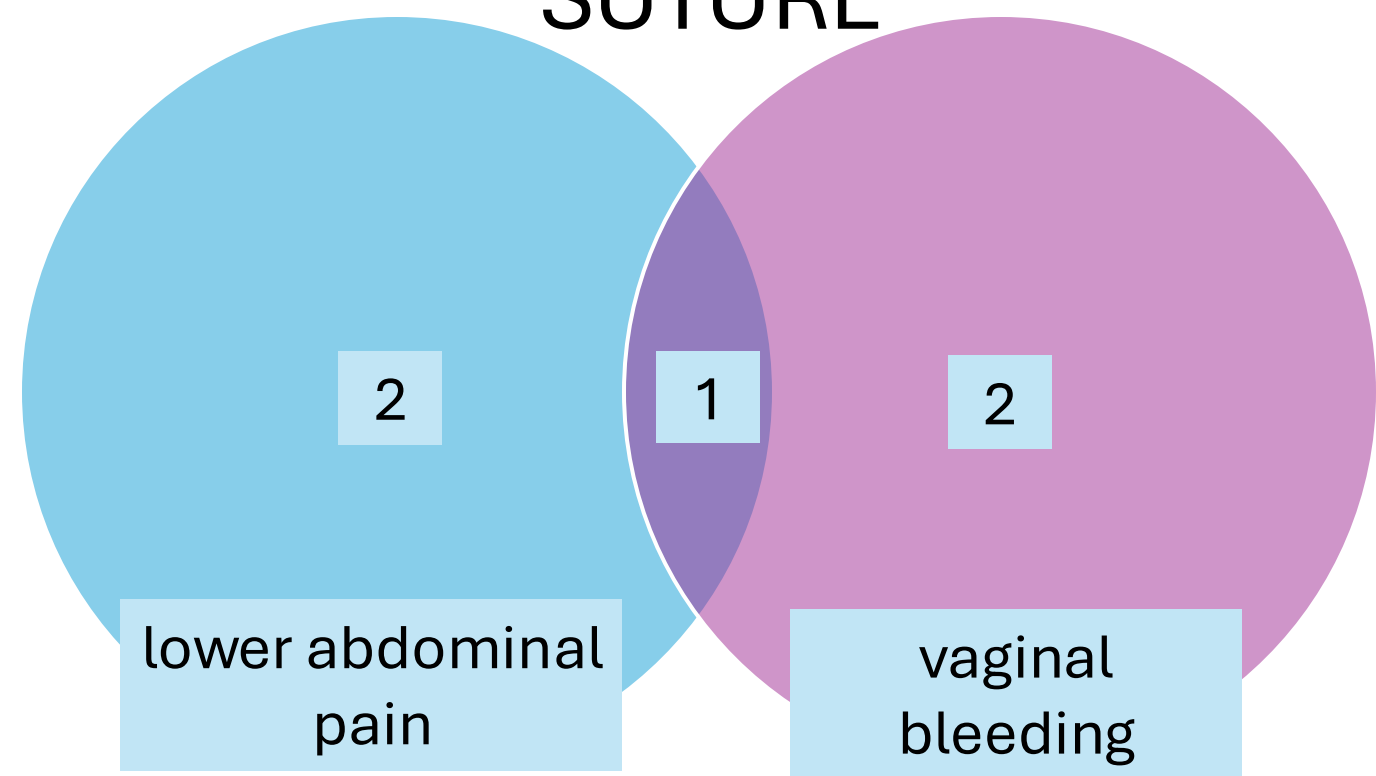
18+1

22+6

PREGNANCY PROLONGATION POST EMERGENCY SUTURE

Mean = 59 days

PRESENTATION PRE EMERGENCY SUTURE



CONCLUSIONS

All of the patients who underwent emergency sutures had poor prognostic factors. Despite this, in two of the five emergency suture cases the pregnancy progressed past 28 weeks. However, both babies were still premature and had NICU admissions with complications of prematurity. This is a small case series, data collection on a larger scale is needed to make recommendations, for example from the C-stitch 2 trial. Care in each pregnancy should continue to be individualised, with realistic counselling about chances of continuation of pregnancy.

RESULTS: PATIENT TIMELINES

CASE 1: 35, BMI 21. P0, missed miscarriage

16 weeks:  
- Abdo pain  
- Speculum: bulging membranes  
- USS: Breech, cord prolapsing Cx 14.5mm

16+1:  
- SUTURE – bulging membranes

4 Hours:  
- SROM – blood stained, membranes bulging  
- Suture removed

2.5 hours:  
- DELIVERY

CASE 2: 29, BMI 21. P1 SVD 36 weeks PPROM. Recurrent UTI, HG

18 weeks:  
- Abdo pain, vaginal loss  
- Speculum – bulging membranes, feet seen  
- USS – transverse, hourglass membranes

18+1:  
- SUTURE - Bulging membranes  
- Bradycardia following

2.5 hours:  
- Increasing pain and distress. Membranes bulging through suture. No FH  
- Suture removed

20 mins:  
- DELIVERY

2 weeks postnatal:  
- POC / endometritis - conservative

CASE 3: 31, BMI 24. P1 CS at 34+4. Sickie trait. Cyclogest early pregnancy for bleeding

16+3 weeks:  
- Vaginal bleeding  
- Speculum – os closed  
- USS – Cx 19.8mm, funnel

4 hours:  
- SUTURE - Bulging membranes – fetal parts seen  
- Urinary retention

15.5 hours:  
- Increasing vaginal pressure  
- Membranes bulging through suture  
- Suture removed

8 hours:  
- No FH on USS  
- Misoprostol

8 hours  
- DELIVERY

Case 4: 31, BMI 18. P1 Caesarean 7 months prior. Refugee, anxiety/ depression, domestic violence

17+3:  
- Post coital bleeding, pressure  
- Membranes bulging outside vulva

17+4:  
- SUTURE- 3-4cm, membranes bulging, feet within  
- D/C with erythromycin and cyclogest

PTB f/u:  
- Weekly to 21+5 then 2 weekly

31+4:  
- SROM – confirmed on speculum, os closed  
- USS: Cephalic FH +  
- Betamethasone, erythromycin, nifedipine, MgSO4

3 hours:  
- 3-4:10, cervix effaced  
- Suture removed, aim SVD

2.5 hours:  
- DELIVERY - vaginal, 1260ml EBL, 2nd degree

NEONATAL:  
- APGAR 7/7  
- Gases 7.3/7.37  
- PEEP AND O2  
- NICU 1 day ventilated and CPAP  
- Jaundice – phototherapy  
- Hypocalcaemia  
- ?sepsis - blood cultures negative  
- Normal cranial USS.

Case 5: 37, BMI 27, P2 CS. Hep B, anxiety/PTSD, refugee, previous domestic violence

22+5:  
- Lower abdominal pain, speculum multips os  
- USS: Cx 14mm, large funnel  
- Declines admission – cyclogest

22+6:  
- PTB: Cx 6.55mm, large funnel  
- SUTURE - Membranes bulging  
- D/C erythromycin and cyclogest

PTB f/u Weekly

30+6:  
- SROM – confirmed on speculum  
- Betamethasone, erythromycin  
- Suture remains

32 weeks:  
- PTB: D8 PPROM  
- Continue erythromycin, delivery if infection / labour

33+3:  
- 24 hours contractions, blood clot  
- Ballooned cervix below suture, liquor clear  
- 2 hours suture removed  
- Benzylpenicillin, MgSO4

33+4:  
- Feeling unwell, generalised abdo pain  
- CRP 43

6.5 hours:  
- DELIVERY - Cat 3 C/S  
- Dense omental adhesions, lower segment poorly formed

NEONATAL:  
- APGAR 9/9/10  
- Gases 7.31/7.37  
- No resus  
- NICU  
- NG feed  
- 36 hours antibiotics (negative blood cultures)  
- Hep B vaccine.