

Novel Management of Childbirth Related Perineal Trauma Breakdown in the Puerperium

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Abstract

We wanted to challenge the 'usual' perineal wound breakdown management model – healing by secondary intention - with new techniques to promote faster healing, fewer complications, quicker recovery times and general patient satisfaction

Design: we deployed some modern and novel management strategies for the management of obstetric perineal trauma in our tertiary unit based in a teaching hospital in West London

Analysis: we reviewed and audited the management and outcomes of 200 patients managed using the 'novel techniques' at our unit. We specifically reviewed the clinical outcomes of healing time, complication rates, and number of clinical appointments, in comparison to conservative management

Conclusions: our modern, proactive approach to obstetric perineal repair saw fewer complications and faster recovery times versus conservative management

Methods

In 2024, as a multi-disciplinary team, it was decided to trial new methods of perineal trauma management to see if they yielded better patient reported outcomes as well as better objective outcomes such as dehiscence, infection and number of clinical visits.

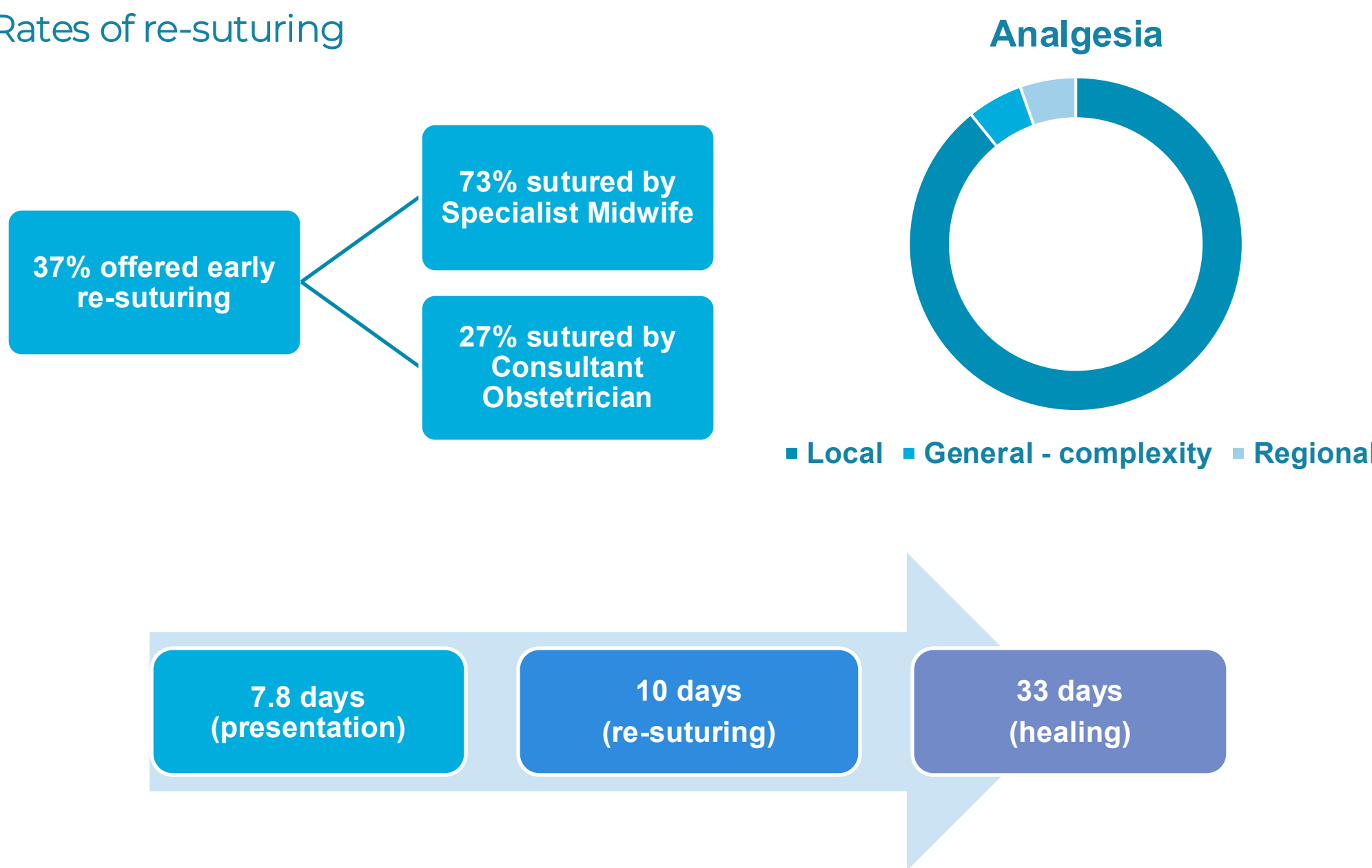
The PPHS service is run by a Perineal Specialist Midwife with support from Obstetricians as necessary. As the primary care provider was continuously the Specialist Midwife, the care provided was consistent and reproducible, with frequent re-review, adjunct therapy (e.g. silver nitrite) as necessary. We feel our results obtained are generalisable to other populations.

A review of 200 patients was done looking at:

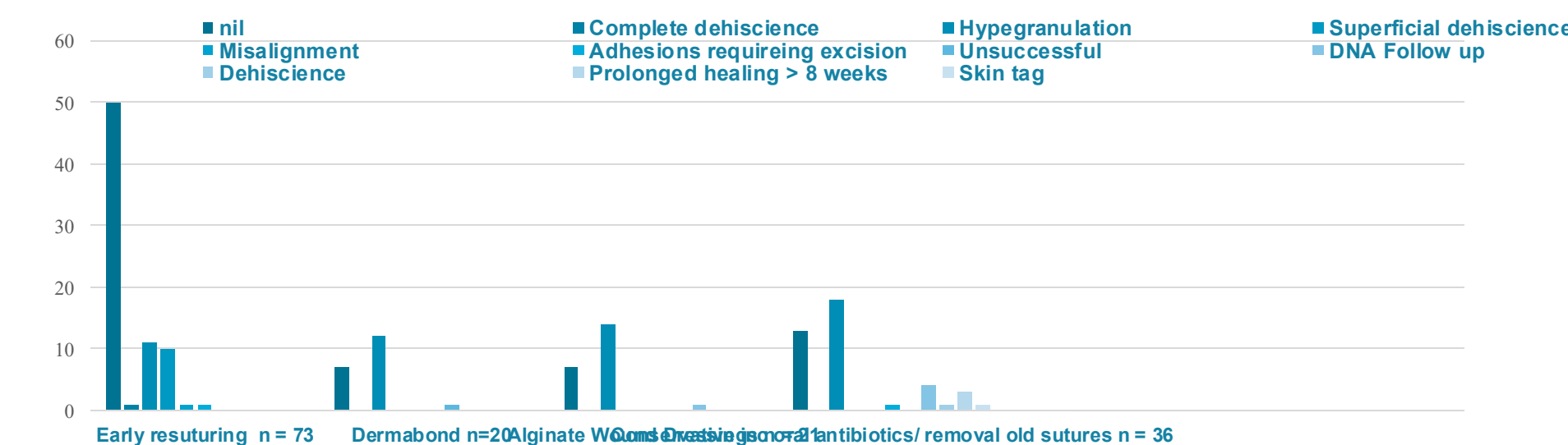
- The type of management recommended
- Outcome of the recommended management
- Healing time
- Patient Satisfaction
- Impact on service (number of clinical visits)

Results

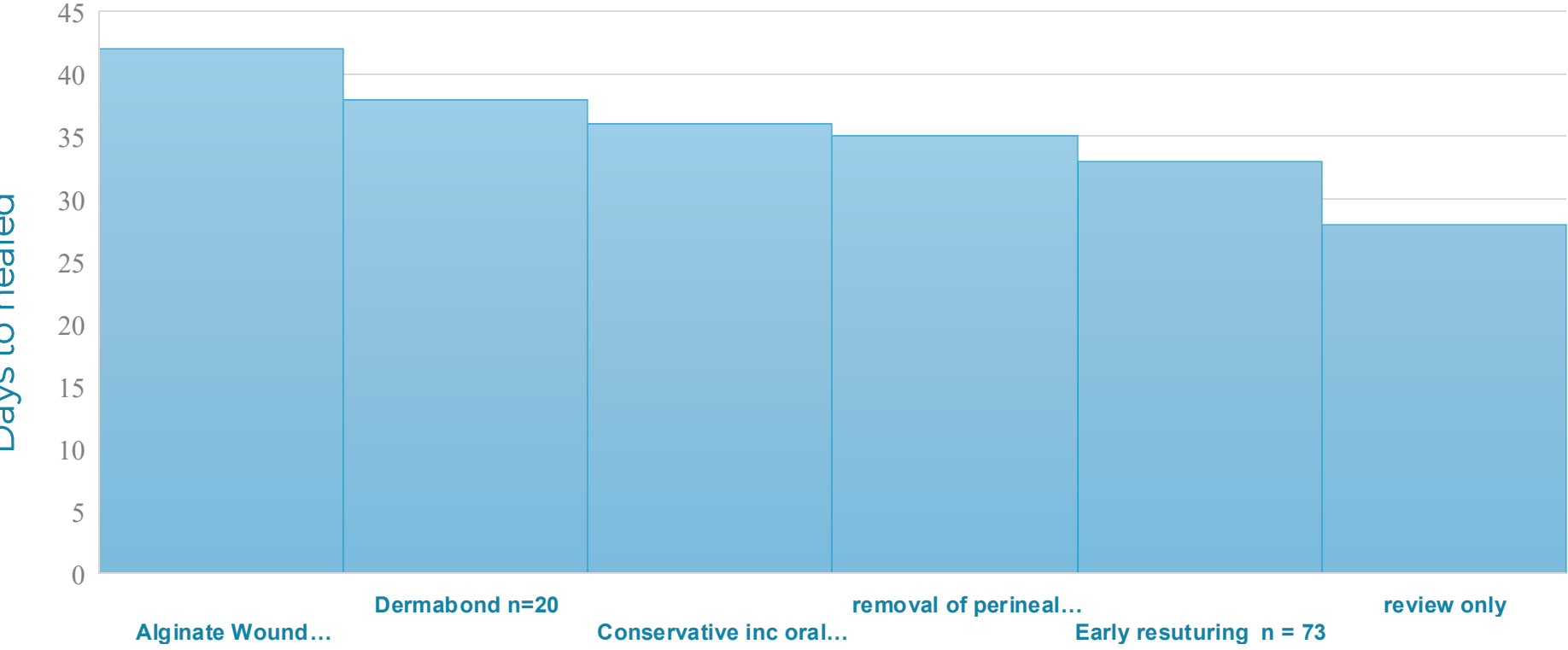
Rates of re-suturing



Complication rates (by technique)



Healing times (by technique)

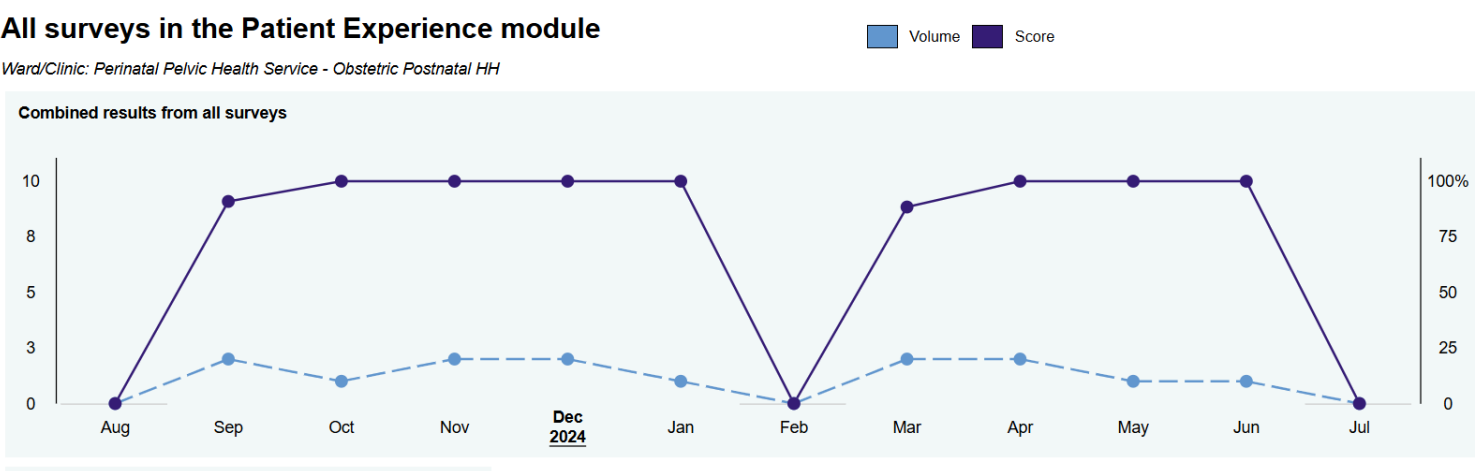


Patient Satisfaction

"[The Specialist Midwife] has been one of the best medical professionals I have come across. She always explained everything that was happening, how to take care of my wound and every appointment and check up was performed with utmost care and sensitivity. All the while she is just a lovely person and made the appointments less embarrassing and less stressful. I couldn't ask for more"

"Have more professionals with genuine passion and care for patients as [the Specialist Midwife]"

"The appointment was on time. She did an excellent job in explaining my care in detail "



The Perineal clinic is well received at Imperial with very high patient satisfaction scores

Introduction

In the UK, **85% of women who have a vaginal delivery will incur some form of perineal trauma**¹. In nulliparous women, this rises to 91%¹. Of this cohort, 60 - 70% will require suturing¹. Approximately 25% of all vaginal births will sustain an episiotomy, rising to >80% with operative vaginal deliveries².

The current overall rate of OASI in the UK is 5.9% (6.1% in primiparous and 1.7% in multiparous)³. These women require particular specialised and longer-term care in perineal clinics. The healing of perineal wounds can be disrupted by complications such as infection (0.1 - 23.6%) and dehiscence (0.2 - 24.6%).⁴

At Queen Charlottes and Chelsea and Hospital we have a multi-disciplinary PPHS (Perinatal Pelvic Health Service), consisting of a Specialist Perineal Midwife, Obstetricians and a Women's Health Physiotherapist.

All women with OASI are referred, as well as any woman thought to have a complicated perineal injury or repair, or anyone seen in the postnatal period with concerns regarding perineal healing or breakdown (up to D28). We will also care for women who have previously had complications.

Women are cared for by the PPHS clinic for up to one year post-delivery, and there are no limits on the number of attendances. A patient may self-refer again, even after discharge, if she has concerns or new complications.

During this study (n = 200), we employed **novel and unusual obstetric perineal care techniques**, which differ from the usual 'conservative' management technique of primary closure immediately post-delivery, followed by allowing healing by secondary intention +/- antibiotics in the event of perineal breakdown.

The 'novel techniques' employed the PPHS team during this study included:

- early secondary re-suturing under local anaesthetic
- use of 'skin glue' (Dermabond)
- nutritional assessment / advice
- use of alginate gels to support healing

All of these newer techniques are common practice in other wound management settings and were supplemented by adjunct perineal massage teaching and physiotherapy as appropriate.

Results

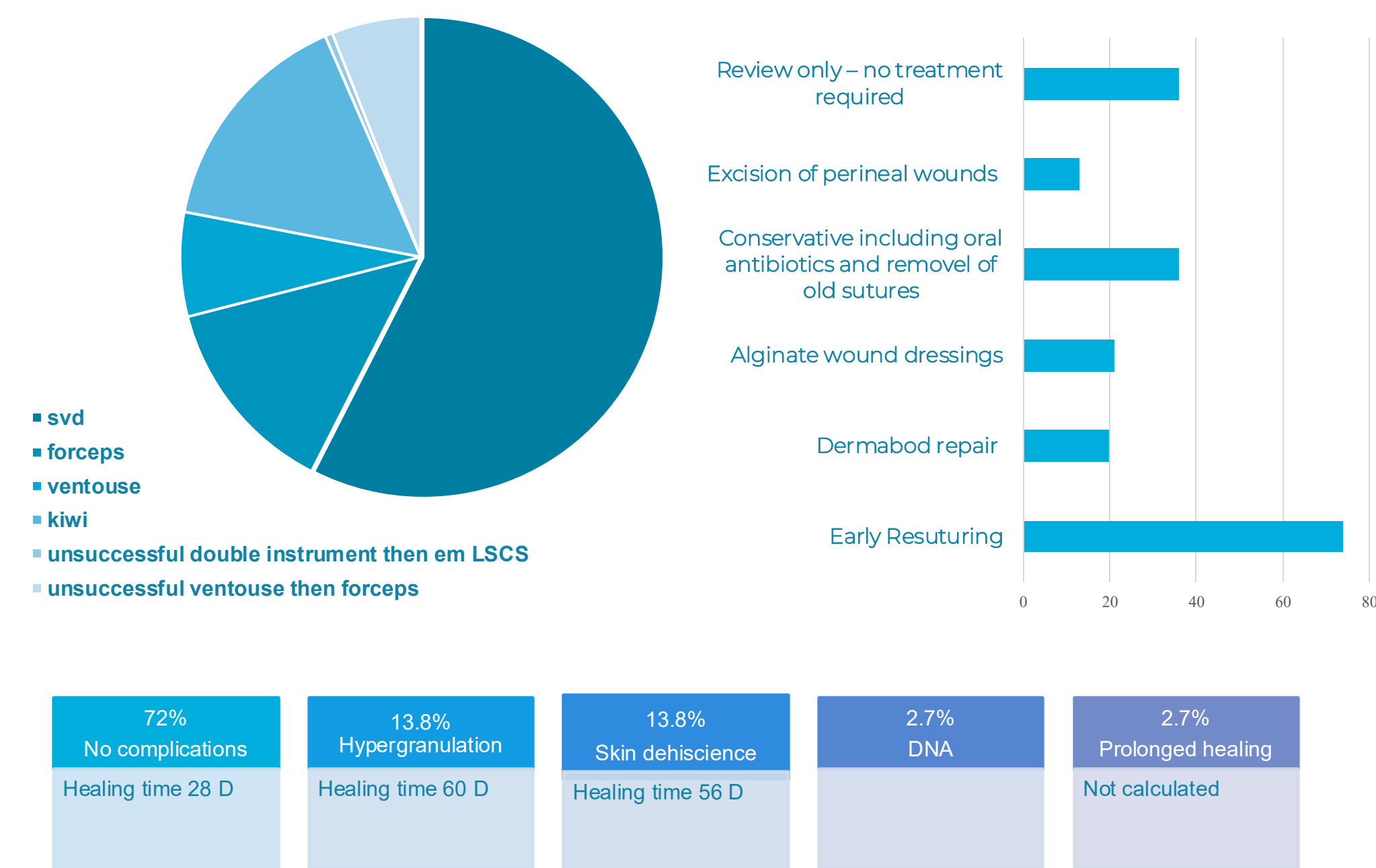
N = 200

The majority (58%) were following an SVD; 41% were following an operative vaginal delivery; 1% were following an unsuccessful trial of vaginal delivery.

On presentation the patient was reviewed by the Specialist Midwife. Opinion was sought from a Consultant Obstetrician as necessary, though this was in a minority of cases.

Average time for completion of episode was 33 days.

Mode of delivery



Conclusion

Our small case review has shown that new and novel techniques in the care of obstetric perineal trauma can yield impressive and consistent results. Improved healing time and fewer clinic visits were identified as the most significant benefits.

Early re-suturing in the first 7-9 days post delivery was particularly associated with fewer complications versus traditional conservative management.

Although there was no financial analysis included as part of our review, it is reasonable to infer that there are economic savings associated with fewer clinic visits , faster recovery and reduced morbidity associated with complications over the longer term.

Patient satisfaction was also very high.

References

- 1 Brandie, K et al, 2009, Perineal trauma following vaginal delivery, Journal of Associated Chartered Physiotherapists in Women's Health, 105, 40-55
- 2 National Maternity and Perinatal Audit, Clinical Report - 2022, RCOG / RCM
- 3 RCOG GTG 29 The Management of Third and Fourth Degree Vaginal Tears, June 2015
- 4 Jonet et al, 2019, The Incidence of Wound Dehiscence and Infection Following Childbirth Related Perineal Trauma, European Journal of Obstetric and Gynaecological Reproductive Biology, Sep;240:1-8