



ALLEVIATING PERINEAL TRAUMA

The APT Study

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Perineal Trauma

- » 'It's severity is frequently underestimated and many women suffer often in silence' Ref: Steen & Cooper, (1998)



Fig 2a. No oedema



Fig 2b. Mild oedema



Fig 2c. Moderate oedema



Fig 2d. Severe oedema

Objectives

- » To evaluate the effectiveness of a new cooling device (gel pad) with a standard regimen (ice pack) and compare these with no localised treatment regimen (control).

Study design

- » **DESIGN**: A randomised controlled trial based in hospital and then continued in the community.
- » **SETTING**: St James's University Hospital and then in women's own homes.
- » **PARTICIPANTS**: 450 women who had undergone either a normal or an instrumental delivery that required suturing of an episiotomy or second degree tear.

Outcome Measures

- » Oedema and Bruising were assessed following suturing, daily from Day 1 to Day 5, at Day 10.
- » Finally at Day 14 (evaluated by visual tool).
- » A categorical healing scale was used to assess healing at the same time points.

The intensity and quality of pain

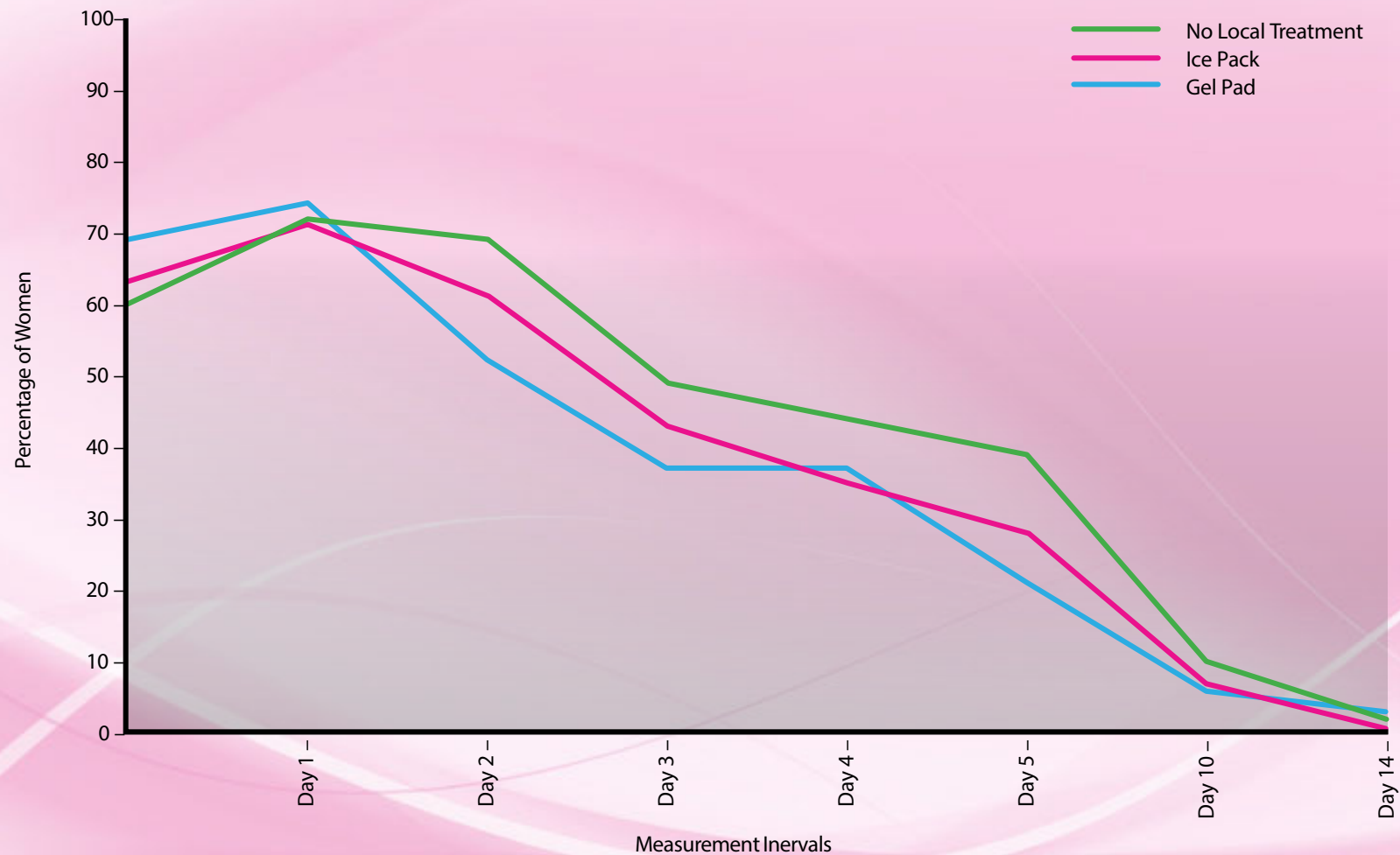
- » **THE INTENSITY OF PAIN:** was measured retrospectively (over the previous 24 hours) by use of a Verbal Rating Scale following the activities of walking, sitting down and lying in bed.
- » **THE QUALITY OF PAIN:** women were asked to describe the pain in their own words.

Results

- » 316 (71%) of questionnaires were returned.
- » Significant reduction in oedema was observed in favour of cooling treatments at Day 2 and Day 5, $p=0.016$, $p=0.018$ (Kruskal Wallis test)
- » Significant reduction in bruising was also observed by Day 10 $p=0.01$ (Kruskal Wallis test)
- » Pain was less in the cooling gel pad group. A significant reduction was seen at Day 5, Day 10 and Day 14, $p=0.023$, $p=0.007$, $p=0.058$, (Kruskal Wallis test)

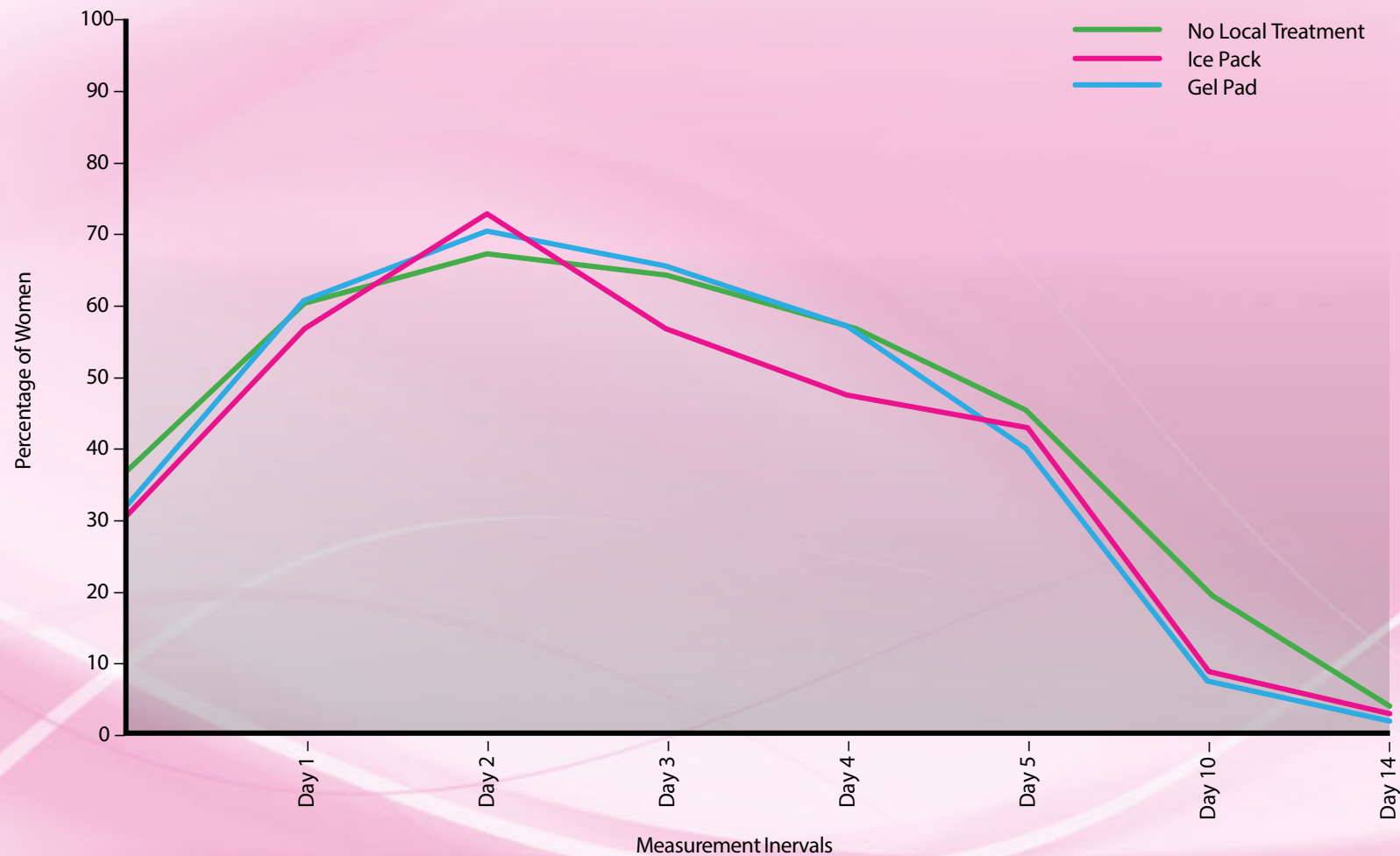
Treatment effect on the % of mothers with some oedema

Fig 1. Treatment effect on the percentage of mothers with some oedema



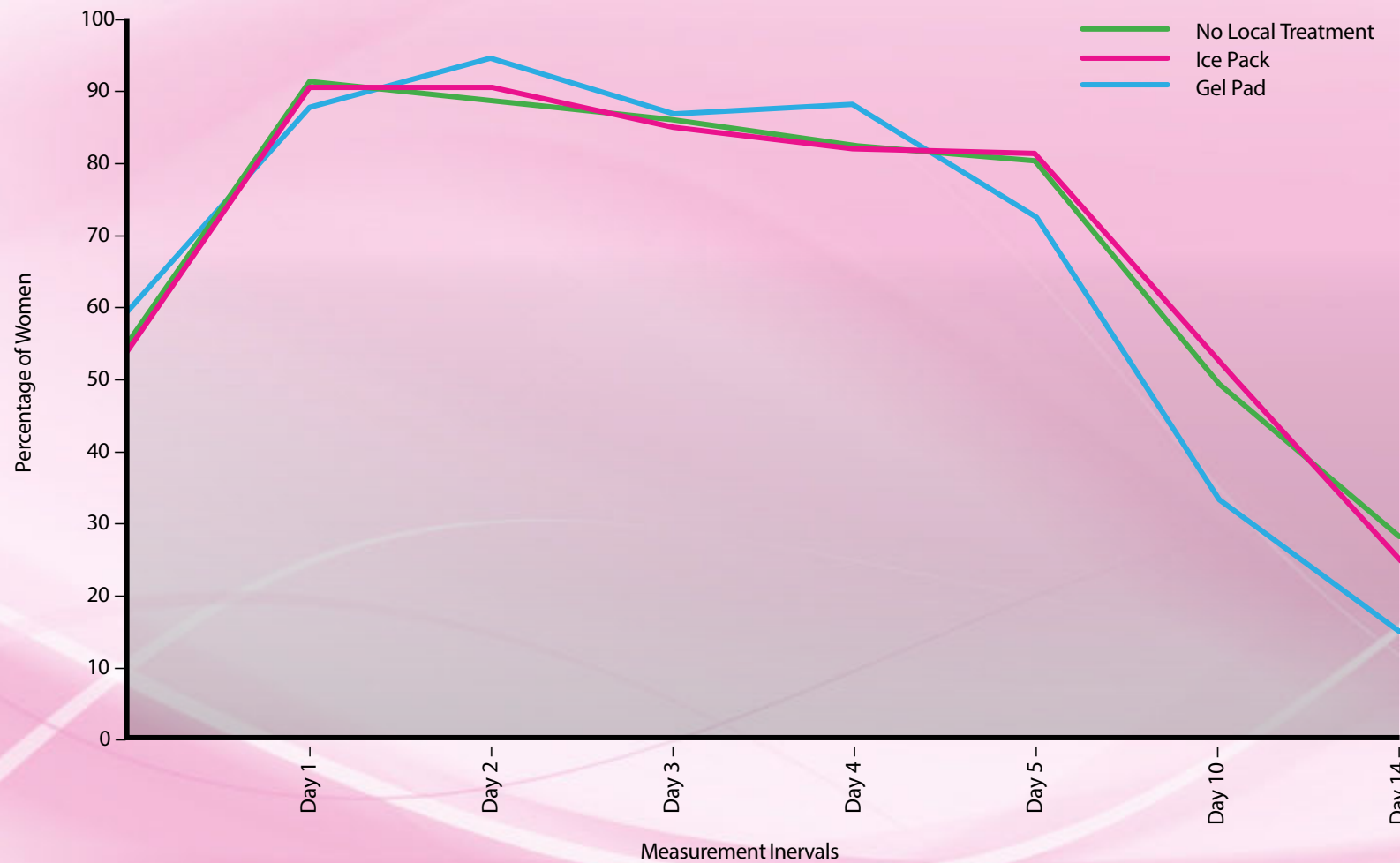
Treatment effect on the % of mothers with some bruising

Fig 2. Treatment effect on the percentage of mothers with some bruising



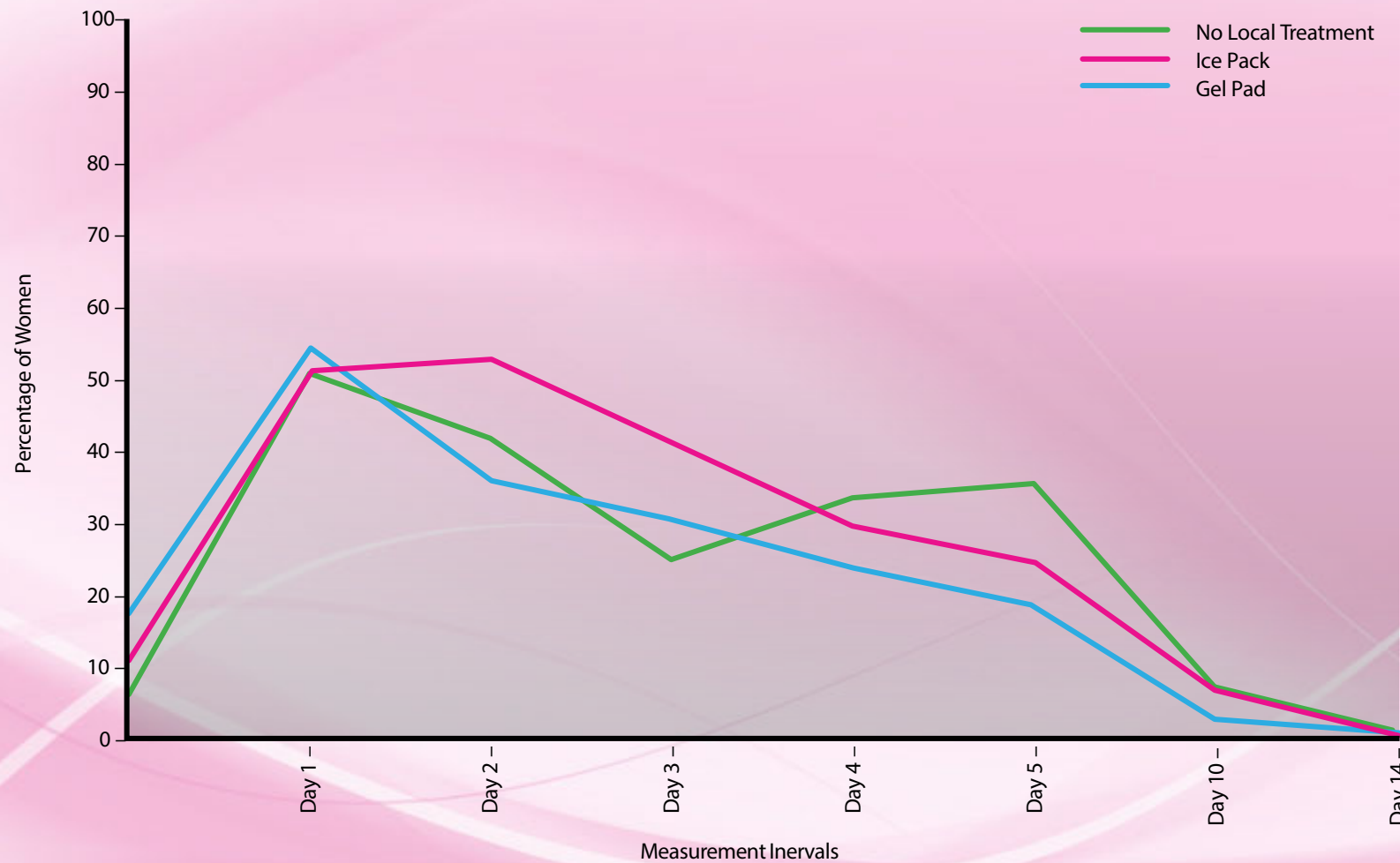
Mothers reporting some (mild/moderate/severe pain)

Fig 3. Mothers reporting some mild/moderate/severe pain



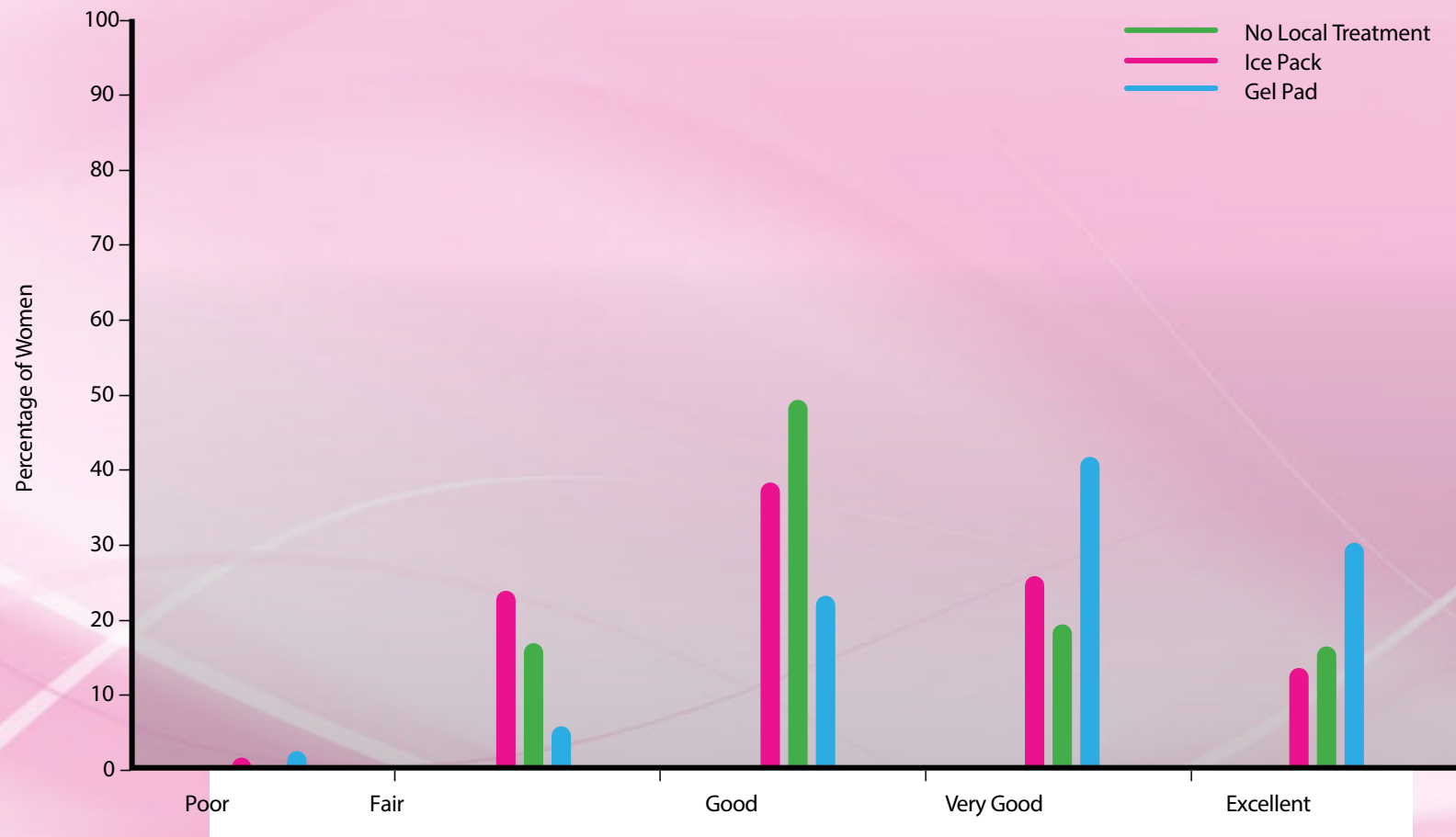
Mothers reporting moderate or severe pain

Fig 4. Mothers reporting moderate or severe pain



Level of Maternal Satisfaction with overall perineal care

Fig 5. Level of satisfaction with overall perineal care



Women's words: Perineal Trauma

- » Word descriptors demonstrated that women use sensory words that are associated with acute pain
- » Majority of words on the McGill Pain Scale
- » Most common words: sore, aching, throbbing and stinging
- » Cooling effect was reported to ease these pain sensations

Conclusions

- » THIS TRIAL CONFIRMS EARLIER FINDINGS IN A PREVIOUS STUDY. EVIDENCE TO SUPPORT THE USE OF A SPECIALLY DESIGNED COOLING GEL PAD IS A SAFE, EFFECTIVE LOCALISED TREATMENT TO ALLEVIATE PERINEAL TRAUMA WITHOUT ANY ADVERSE EFFECTS ON HEALING.

Awards

- Elizabeth Clark Charitable Trust Award (1993)
- NHS Executive Research Fellowship (1996)
- Travel Awards (1997/98) (USA/Australia)
- Highly Commended - Original Research (1997)
- 3rd Prize - Clinical Innovation Category (1998)
- Runner-up Wound Care Nurse of the year 1999
- Smith & Nephew Foundation 1999 Nursing Research Fellowship
- Finalist in the Nye Bevan Awards 2000
- Winner of the Yorkshire Woman of the Year 2002 Community Award

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