

## WATER BIRTHS - DOES IT REDUCE PERINEAL TEARS AND PROTECT THE PELVIC FLOOR?

### Hypothesis / aims of study

There is a widespread debate if delivery under water is protective to the perineum or worse for the pelvic floor as it tends to be less supported or even hands free in most instances. The aim of this study is to evaluate the perineal outcomes in women who had delivered under water.

### Study design, materials and methods

The sample population consisted of 470 women who had consented and wished to deliver in water. Women beyond a gestational age of 36 weeks with low risk singleton pregnancies were considered. The incidence of first, second and third degree perineal tears as well as episiotomy and labial tears were analysed. Any significant association between positions during delivery, duration of second stage, type of delivery, baby weight and perineal tears were also evaluated. Analysis was performed using the statistical data management package, SPSS version 16.0.

### Results

The vast majority of women were in the 26-30 age group with the youngest being 16 and the oldest, 42. 67.4% of the women were 37-40 weeks gestation and the remaining were 41-42 weeks. 72.9% of the women delivered under water while the rest left the pool for various reasons with the commonest being maternal choice (26.7%) followed by the need for further pain relief (21.2%). 29.7% had a first degree tear, 8% had a second degree tear and 0.6% had a third degree tear. 4% required episiotomy and 27% of all these tears required suturing. 95.7% had an estimated blood loss of less than 500mls.

The majority of women delivered in all fours (25.3%) and semi recumbent position (25.1%). 22.9% were delivered using the hands-on technique and 65.3% were delivered by the hands-off technique.

### Interpretation of results

Immersion in water in first stage is known to be good for pain relief and reduces the need for analgesia. Very few studies have explored birth under water and its effect on maternal pregnancy outcomes (1). In their statement on water births, The royal college of obstetricians and gynaecologists of UK (2) have encouraged the use of water births with an aim to promote patients' choice and participation in their delivery process. Hitherto, there is evidence to state that immersion in first stage does not adversely affect the maternal outcomes. The current study has revealed that the water births produced good results. The various positions that the women can adopt during parturition might make it more conducive for less traumatic delivery and hence the water births might be protective to the pelvic floor.

### Concluding message

Overall water births were associated with less perineal tears. The reduced incidence of pelvic trauma in the hands-off group is encouraging and might be the way forward in all water births; however this needs to be employed with caution in spontaneous vaginal deliveries.

### References

1. Cluett ER, Nikodem VC, McCandlish RE, Burns EE. Immersion in water in pregnancy, labour and birth. Cochrane Database Syst Rev. 2004;(2):CD000111
2. Royal College of Obstetricians and Gynaecologists. Birth in Water. RCOG Statement. London: RCOG; 2001

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<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>No</b>
<b><i>This study did not require ethics committee approval because</i></b>	<b>This study is a part of the local audit process.</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>No</b>
<b><i>This study did not follow the Declaration of Helsinki in the sense that</i></b>	<b>the study was to audit the local practice of water births</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>