Obstetrics and gynaecology

Position during second stage of labour may influence spontaneous vaginal delivery rates

Nulliparous women, undergoing epidural analgesia, who adopted a lying down position were more likely to achieve a spontaneous vaginal delivery than those in an upright position during the second stage of labour, a UK study has found.

After exclusions, 3,093 nulliparous women at term, and in the first stage of labour, were randomised to adopting either an upright position (1,556) or horizontal (1,537) during the second stage. All were receiving epidural analgesia. Labour was induced in 39.5% and 41.2% respectively. The primary outcome was spontaneous vaginal delivery.

There were numerous secondary endpoints relating to the conduct and complications of childbirth, fetal outcome, longer term maternal postnatal progress, satisfaction and wellbeing.

Participating midwives were given training to help them support mothers in their allocated position. Women allocated to an upright position were encouraged to keep the plane of the pelvis vertical whether they were sitting, kneeling, standing up or ambulant. Women allocated to a horizontal position were wedged at an angle of 30˚to prevent aorto-caval compression.

Adherence to the protocol was good during the passive phase of the second stage of labour. The percentages for 'mostly adherent' were 75.8% and 72.3% for upright and horizontal allocations respectively. During the active pushing stage the 'mostly adherent' rates dropped to 72.5% and 63.7% respectively.

Spontaneous vaginal delivery was significantly less common in women allocated to an upright posture compared with those lying down (35.2% vs 41.1%). Adjusted risk ratio (RR) 0.86 (95% CI: 0.78-0.94). These figures did not change when adjusted for maternal age, ethnicity, or whether labour was spontaneous or induced, for example. Spontaneous vaginal delivery was 5.9% higher in women allocated to lying down.

There were some differences in secondary outcomes between the groups but none reached statistical significance. However, several trends were identified favouring the lying down position. There was a trend for a shorter second stage of labour (median difference 7 minutes). For instrumental delivery the figures for upright vs lying down were: 54.6% vs 50.6%; RR 1.08 (95% CI: 0.99-1.18) and for Caesarean section 10.2% vs 8.3%; RR 1.23 (95% CI: 0.92-1.64). Postpartum haemorrhage (requiring blood transfusion) rates were 4.1% and 3.4% respectively; RR 1.02 (95% CI: 0.75-1.93).

For fetal outcome variables there were no significant differences between the groups with respect to: the presence of meconium; need for resuscitation at birth; and breast feeding within one hour of birth.

When surveyed just after delivery for satisfaction with the birth experience, expectations of labour, feeling of safety, and satisfaction with position in the second stage, there was no difference between groups.

At one year no differences were identified in bowel or bladder function and control, and general wellbeing. Dyspareunia rates were equivalent.

The authors could only speculate as to why nulliparous women with epidural analgesia adopting a lying down position were more likely to achieve a spontaneous vaginal delivery. Perhaps being upright produces a denser epidural block with more interference with the urge to push, or that being upright results in more venous engorgement and oedema in the lower genital tract. A lying down position might improve uterine blood flow which might aid contractions.

Whether a lying down position is better for multiparous women, or women not undergoing epidural analgesia is not yet clear.

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The Epidural and Position Trial Collaborative Group. Upright versus lying down position in second stage of labour in nulliparous women with low dose epidural: BUMPES randomised controlled trial. *BMJ* 2017;359:j4471

Addiction

Are differing emotional responses to alcohol associated with choice of drink?

Emotional responses to drinking appear to vary according to the type of drink imbibed and differ between men and women, an analysis of data from the Global Drug Survey (GDS) has found.

Data from almost 30,000 respondents to the 2016 GDS, aged 18-34 years, who had reported drinking alcohol in the past 12 months were extracted. The GDS is the largest worldwide drug survey. It is implemented annually via an online platform in 11 languages, is promoted internationally, and represents self-reported alcohol and drug use among those aged over 16.

More than half the respondents said that they associated drinking spirits with energy (58.36%) and confidence (59.08%) and 42.4% that spirits made them feel sexy, see table 1, opposite.

Respondents were most likely to report feeling relaxed (52.8%) when