Obstetrics and gynaecology

Labour induction vs expectant management in nulliparous women

Induction at term significantly reduced the Caesarean section rate, compared with expectant management, in low-risk nulliparous women in a large multicentre trial from the US. However, it did not confer any benefits in terms of perinatal outcomes.

A total of 6,106 nulliparous women with uncomplicated pregnancies were enrolled in the 39th week of pregnancy. Of these, 3,062, median age 24 years, were randomised to induction at 39 weeks 0-4 days, and 3,044, median age 23 years, to expectant management.

Women in the latter group were asked not to have an elective delivery before 40 weeks 5 days, and to deliver before 42 weeks and 2 days.

After accounting for drop-outs and protocol violations the final numbers were 2,875 in the induction group and 2,879 in the expectant management group. The groups were demographically similar.

The primary perinatal outcome was a composite of perinatal death or severe neonatal complications e.g. the need for respiratory support, seizure, sepsis, encephalopathy. This occurred in 133 (4.3%) induced and 164 (5.4%) expectant management pregnancies. The difference was just below the level required for statistical significance RR 0.08 (95% CI: 0.64-1.00; P = 0.049).

Only the need for respiratory support was significantly higher in babies in the expectant management group: 91 (3.0%) vs 127 (4.2%); RR 0.71 (95% CI: 0.55-0.93).

There was no significant difference between the groups in secondary perinatal outcomes (e.g. birthweight, cephalhaematoma, hyperbilirubinaemia).

The primary maternal outcome was Caesarean section which was significantly lower in the induction group (18.6% vs 22.2%), RR 0.84 (95% CI: 0.76-0.93, P < 0.001). This equates to one fewer Caesarean section for every 28 women induced at 39 weeks' gestation. The difference was independent of the Bishop score assessed in both groups in the 38th week, before randomisation was performed.

Women randomised to induction reported slightly less pain during labour (using the 10-point Lickert pain scale) and perceived slightly more control during labour (using the Labor Argentry Scale). They did however spend more time in the labour and delivery wards than those randomised to expectant management although their overall hospital stay was shorter.

Of the various secondary maternal outcomes surveyed, only hypertensive disorders were significantly different. There were 227 cases (9.1%) in the induction group vs 427 (14.1%) in the expectant management group; RR 0.64 (95% CI: 0.56-0.74; P < 0.001).

This large well organised study was reassuring in that elective induction at term does not appear to increase the Caesarean section rate; in fact, it reduced it. However, it did not show any fetal/neonatal benefit in terms of mortality or serious morbidity.

The authors caution that limitations to the study include the possibility of ascertainment bias, as it could not be conducted blind, most adverse perinatal outcomes were relatively rare and the study was not powered to detect differences in infrequent outcomes. Furthermore, it was not clear whether the results could be generalised across other populations.

The author of an accompanying editorial points out that women who agreed to take part in the study were younger, median age 23-24 years compared with a mean of 28.7 years for new mothers in the US, and only 4.1% were >35 compared with a national average of 17%. They were also more likely to have been of black or Hispanic ethnicity.[1]

Whether elective induction at 39 weeks' gestation may be beneficial in multiparous and older women remains to be seen. The logistical implications of an increased duration of stay in labour wards and birthing units in women electively induced at 39 weeks would have to be considered too.

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Mental health

Apathy associated with incident dementia in the elderly

Apathy symptoms may identify older patients who are at increased risk of developing dementia, a Dutch prospective cohort study has found.

Data were obtained from the Prevention of Dementia by Intensive Vascular Care trial. Participants were aged 70-78 years, resident in the community and free from dementia at baseline.

The 15-item Geriatric Depression Scale (GDS) was used to identify symptoms of apathy (3 items) and depression (12 items). The three apathy questions were:

- Have you dropped many of your activities and interests?
- Do you prefer to stay at home, rather than going out and doing new things?
- Do you feel full of energy?

Participants were followed up at two-yearly intervals over a period of six to eight years. A total of 3,427 participants completed follow-up and were included in the analysis. Incident dementia was diagnosed clinically using DSM IV criteria and confirmed by an independent adjudication committee.

Overall, 232 (6.8%) of the participants developed dementia.