WHO recommendation on induction of labour at term for suspected fetal macrosomia

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Recommendation

Induction of labour at term is not recommended for suspected fetal macrosomia.

(low-quality evidence, weak recommendation)

Publication history

First published: February 2011
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Remarks

- Confirmation of suspected macrosomia is based on reliable determination of fetal age and weight, which requires ultrasound assessments early in pregnancy and then at near term. Considering that in under-resourced settings ultrasound facilities may not be available or accessible to all women, the participants in the technical consultation preferred not to recommend induction of labour for suspected macrosomia, even though they acknowledged that in cases of confirmed macrosomia induction of labour could reduce the incidence of clavicle fracture due to shoulder dystocia.

Background

Induction of labour is defined as the process of artificially stimulating the uterus to start labour. It is usually performed by administering oxytocin or prostaglandins to the pregnant woman or by manually rupturing the amniotic membranes. Over the past several decades, the incidence of labour induction for shortening the duration of pregnancy has continued to rise. In developed countries, the proportion of infants delivered at term following induction of labour can be as high as one in four deliveries.

Over the years, various professional societies have recommended the use of induction of labour in circumstances in which the risks of waiting for the onset of spontaneous labour are judged by clinicians to be greater than the risks associated with shortening the duration of pregnancy by induction. These circumstances generally include gestational age of 41 completed weeks or more prelabour rupture of membranes.
amniotic membranes, hypertensive disorders, maternal medical complications, fetal death, fetal growth restriction, chorioamnionitis, multiple pregnancy, vaginal bleeding and other complications.

Although currently available guidelines do not recommend this, induction of labour is increasingly being used at the request of pregnant women to shorten the duration of pregnancy or to time the birth of the baby according to the convenience of the mother and/or health-care workers.(5, 6)

Methods

The recommendation was developed using standardized operating procedures in accordance with the process described in the “WHO handbook for guideline development”, guided by the GRADE approach.(7, 8) Outcomes used for this recommendation were aligned with the prioritized outcomes from the WHO recommendations on induction of labour (2011).(9)

A Cochrane systematic review was conducted, on induction of labour for suspected fetal macrosomia.(10) In the review, randomized controlled trials relevant to the key question were screened by review authors, and data on relevant outcomes and comparisons were extracted. Evidence profiles (in the form of GRADE tables) were prepared for comparisons of interest, including the assessment and judgments for each outcome, and the estimated risks.

WHO convened a Guideline Development Group (GDG) meeting on recommendations induction of labour in April 2010, where this recommendation was developed. The GDG comprised of a group of independent experts, who used the evidence profiles to assess evidence on effects on the pre-specified outcomes. GDG members discussed the balance between desirable and undesirable effects, overall quality of supporting evidence, values and preferences of stakeholders, resource requirements, cost-effectiveness, acceptability, feasibility and equity, to formulate the recommendation. Remarks were added to clarify the recommendation, and aid implementation.

Recommendation question

For this recommendation, we aimed to answer the following question:

- in cases of suspected fetal macrosomia (P), does induction of labour (I), compared to no intervention, (C), improve maternal and perinatal outcomes (O)?

Evidence Summary

To obtain evidence for this indication, the existing systematic review (10) with three trials was updated by the guideline development group with data from a recent unpublished trial that had evaluated induction of labour for suspected macrosomia. For the priority comparisons and outcomes, induction of labour at term was similar to expectant management. With regard to other outcomes that are relevant for this comparison, but not a priority for the present guidelines, induction of labour was associated with fewer clavicle and arm fractures due to shoulder dystocia (four trials, 1189 participants, RR 0.2, 95% CI 0.05–0.79) (EB Table 1.3.1).

Implementation considerations
The successful introduction of this recommendation into national programmes and health-care services depends on well-planned and participatory consensus-driven processes of adaptation and implementation. The adaptation and implementation processes may include the development or revision of existing national guidelines or protocols based on this recommendation.

- The recommendation should be adapted into a locally appropriate document that can meet the specific needs of each country and health service. Any changes should be made in an explicit and transparent manner.
- A set of interventions should be established to ensure that an enabling environment is created for the use of the recommendations (including, for example, the availability of induction agents and monitoring capacity), and that the behaviour of the healthcare practitioner changes towards the use of this evidence-based practice.
- In this process, the role of local professional societies is important and an all-inclusive and participatory process should be encouraged.

Research implications

The GDG identified that further research on the following high-priority questions is needed:

- What risks (for both the mother and the fetus) are associated with induction of labour and, in terms of those risks, how does induction of labour compare with elective caesarean section? What is the role of caesarean section in the management of women in whom induction of labour has failed?

Related Links

WHO recommendations on induction of labour (2011) – full document and evidence tables

Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

Managing Complications in Pregnancy and Childbirth: A guide for midwives and doctors (2nd ed)

Supporting systematic review:


References


Citation


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