ISA Position Statement: Fetal Movement Monitoring

26 October 2009

Prenatal surveillance: Detection and management of decreased fetal movements

**Statement of principle**

The aim of prenatal surveillance is to identify women at increased risk for stillbirth and other complications in order to improve the baby’s chances of survival, while encouraging a balanced approach to testing and intervention.

While the vast majority of women who perceive decreased fetal movements (DFM) do not experience adverse pregnancy outcome, in general the risk is increased. A large proportion of women who have had a stillbirth reported decreased fetal movement. In addition, many who did notice a decrease in movement and had a stillbirth waited a considerable time before seeing their medical provider where a diagnosis of death was made.

While the benefit of formal fetal movement counting (kick counting) as a routine surveillance tool and management strategies for DFM have yet to be proven, health care providers should accept a woman’s perception of decreased fetal movements as a sign of a potentially at-risk pregnancy and act accordingly.

There is indirect evidence that the stillbirth rate decreases in populations where mothers are informed about DFM.

**Best practice points**

- All women should be given information about fetal activity during the prenatal period and advised to report to the health care provider concerns about a reduction in movements, even near the expected due date, that very day or night.

- The presentation of a woman with DFM should prompt a thorough evaluation of the current complaint, maternal, obstetric and fetal risk factors and on the basis of findings formulate a plan of care. The goal of the evaluation is to rule out imminent fetal demise (stillbirth) and to assess for common risk factors such as fetal growth restriction and decreasing placental function.

- Ongoing management includes:
  - Specific care where complications are identified;
  - Closer surveillance and consideration of the risks and benefits of early delivery for women with persistent DFM where no cause is identified

- Women should trust their instincts; if concerned about a reduction in movements women should tell their health care provider that very day or night. Women with continued DFM require ongoing evaluation and should not hesitate to continue to report their concerns about DFM to their health care provider.

- Since most women hear from others that the baby "slows down before birth", it is natural for them to believe that a slowing of fetal movement toward the end of pregnancy is normal. However, that is not necessarily the case. While the nature of fetal movements may change due to restricted space and sometimes there are changes in wake/sleep cycles
towards the end of pregnancy, an actual reduction in the level of activity is not considered normal.

- Some women may find kick counting helpful in keeping track of the baby’s movements. For women who decide to do so the following is provided as a guide: Wait until the baby begins a "wake cycle", lie down on your side and count how long it takes the baby to move 10 times; rolling and wiggling count, not counting hick-ups. This should usually take only 10-30 minutes, if you perceive decreased fetal movements and it takes longer than 2 hours you should contact your health care provider day or night. However, regardless of results of counting kicks, if a woman is concerned about a reduction in fetal movements she should contact her health care provider day or night.

**Research gaps**

Further research is urgently required to define optimal screening and management approaches for women with DFM. We concur with the recommendation from the Cochrane review authors [1], on future research in the area of fetal movement monitoring including: assessing the sensitivity and specificity of fetal movement counting in detecting fetal compromise; its effectiveness in decreasing perinatal mortality in high-risk and low-risk women and its acceptability and ease of use by women. The encouraging findings of the quality improvement project in Norway[2], implementing clinical practice guidelines and information for women across maternity hospitals requires confirmation in further studies.

**ISA endorsed initiatives**

A number of studies are underway internationally to contribute to the body of knowledge on DFM. Baseline data on the frequency of reporting of DFM, interventions undertaken and outcomes for women with DFM have been identified through prospective observational studies in the US, Norway and Australia as part of the Fetal Movement Intervention and Assessment (Femina) Collaboration. A large dataset on fetal movement activity derived from KICK charts in Norway will assist in better defining individualised normative data. Randomised controlled trials are being undertaken or currently under development improving the detection of those women at risk based on fetal movement patterns and management strategies for women with DFM.

**Further reading**

For background reading please click here.

**Development of this Statement and Consultation**

The Consultation Draft dated 23 October 2009 was developed by a working party of the Parent Advisory Committee (PAC) and Scientific Advisory Committee (SAC) and refined following feedback by the wider PAC and SAC members and the ISA Board.

We are currently inviting comment from the international community prior to finalisation of the statement. We ask that all comments be submitted to the ISA secretariat by 15 December 2009. ISA, through its Parent Advisory and Scientific Advisory Committees will review all comments and, in consultation with the PAC and SAC will address each comment received and incorporate these by consensus of these Committees.

Please click here to send comments to ISA.

**Revisions**

This Statement will be revised annually, or earlier if required, based on new evidence and comments received.
ISA Fetal Movement Monitoring Position Statement (PS) Working Party members

Jan Jaap Erwich (SAC), Vicki Flenady (SAC and PS coordinator), Stephanie Fukui (PAC), Ruth Fretts (SAC), Frederik Frøen (SAC), Sherokee Ilse (PAC), Anais Gschwind (ISA Secretariat, Research Assistant).