

Last month, in part 1 of this article, I looked at some of the issues around routine screening of cervical length measurement (CLM) by transvaginal ultrasound (TVU). Although some authors are promoting the idea of routine antenatal CLM screening, along with interventions such as cervical cerclage for women deemed to have short cervixes (e.g. Heath et al 1998), others are advising caution. For example, Hoesli et al (2003) argue that the sensitivity and specificity of this test are not within acceptable limits and that many questions remain about whether and how we can prevent preterm labour.

### TVU as a Diagnostic Tool

In some areas, TVU is offered to women who are admitted to hospital with threatened preterm labour. Although the use of CLM by TVU has more support in the medical literature as a diagnostic (rather than screening) test, one midwife suggested to me that this *“seems a bit like closing the proverbial stable door”*.

Where a woman with threatened preterm labour considers whether to undergo CLM by TVU, the most important questions relate to that woman's particular story. Will the outcome of the test change the options available to the woman, or will it provide her with information that she wishes to have before making a decision about possible treatments? For instance, are the treatments and drugs that are offered to women experiencing threatened preterm labour acceptable to her? Will the findings of TVU change the options that are offered to her, or will she be advised to undergo treatment regardless? Of course, even if she would not consent to medical treatment, she may still like to have as much information as possible.

It is also important to consider any possible risks of TVU as a procedure. In many areas, midwives do not digitally examine women who present with threatened preterm labour; partly because this is deemed to be 'abnormal' and thus is the remit of obstetrics, and partly because unnecessary cervical stimulation could cause prostaglandin release and thus intensify the problem. But isn't there also a risk that the insertion of an ultrasound transducer into a woman's vagina might introduce a degree of stimulation and exacerbate the very problem that it is being used to diagnose?

### Cervical Stories

In an ideal world, the diagnosis of preterm labour arises as the logical conclusion of a number of different pieces of information rather than from one factor. I believe we should be wary about any diagnosis of preterm labour made from the results of TVU alone, not least because women can have very different cervical stories, which can provide more insight into the issue of false positive results. For example:

- Saskia became pregnant as a student midwife, and hadn't yet perfected the art of vaginal examination, so decided to learn on herself. She soon figured out what she was feeling, and it was fascinating to hear how her cervix changed every few days during the last weeks of her pregnancy; not only shortening, thinning and dilating, but sometimes becoming longer and less dilated than before.
- Sunita, who was both curious and well acquainted with her midwife, was examined every week during the last month of her first pregnancy. Her cervix was 4-5cm dilated every time, and perhaps had been for a while before this. Her baby did not fall out, and she went on to have a normal labour and home birth at term. I often wonder what might have happened had Sunita been "booked" in one of those trusts where cervical length measurement by TVU is becoming routine.

As most midwives will know from their own experience, the behaviour of women's cervixes is somewhat mysterious, marvellously erratic and essentially unpredictable. This is supported by the research of Bergelin and Valentin (2001), whose longitudinal study identified several normal, but different, patterns of change in cervical length and other attributes during the pregnancies of the women they studied. As their research and women's stories show, no woman's cervix is a static, solid, immovable organ. Even in non-pregnant women, the cervix dips, rises, opens and closes according to the different phases of the menstrual cycle. The cervix alters position and texture when we make love, and probably does all sorts of other marvellous things that we don't even know about. What on earth

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makes us think that pregnancy would suddenly make women's cervixes decide to behave in the ordered ways described by textbooks and graphs?

As far as the prevention of preterm labour is concerned, there is much we need to learn and explore before we can draw any firm conclusions. If I am honest, I am not sure whether we will ever know everything there is to know about the behaviour of the cervix in relation to preterm birth. I do, however, believe that we need to at least attempt to broaden our knowledge in as many areas as possible before we conclude that the cervix is the villain of this picture and routinely use TVU to monitor and control its activity.

### References

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