

Treatment of a shortened cervix in mid-pregnancy

Measurement of the length of the cervix in mid-pregnancy is one of the best predictors for preterm delivery.

A shortened cervix between 16 and 26 weeks of pregnancy is strongly associated with preterm birth and a long cervix is associated with a term birth.

The earlier a short cervix is detected, the higher the risk of a preterm delivery.

When the cervix is measured with ultrasound earlier than 16 weeks or later than 26 weeks gestation, the length of the cervix is much less predictive.

All pregnant women in WA are offered a standard mid-trimester fetal anatomy scan, typically at 18 to 20 weeks of pregnancy. The Western Australian Preterm Birth Prevention Initiative recommends that the length of the cervix is included as a standard measurement at these scans.

There are two ways to measure the length of the cervix using ultrasound: either as part of the usual transabdominal scan, or by the additional use of a special transvaginal (internal) approach.

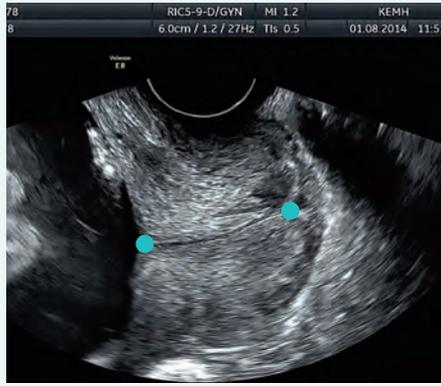
When using the standard transabdominal approach, measuring the cervix is relatively quick and straightforward.

However, imaging through the abdomen is best done with a full bladder and the stretching effect of the full bladder may provide a misleading elongation of the length of the cervix. The full bladder, however, cannot stretch the cervix more than 10mm.

For various reasons, the cervix cannot always be measured using this ultrasound method. Problems include the bladder not being full enough and fetal parts shadowing over the cervix, which prevent the ability to see the entire cervix and measure accurately.

Transvaginal scanning is performed with an empty bladder and provides a true measurement of the length of the cervix.

The evidence is suggesting that transvaginal imaging of the cervix is the most accurate way of imaging the cervix.



Many professional bodies are now recommending that a transvaginal measurement of the cervix should occur for all women at the time of the fetal anatomy survey.

A cervical length of more than 25mm on a transvaginal ultrasound is considered normal, and any length less than 25mm warrants further investigation or treatment.

Women at low-risk of preterm birth with a suitably long cervix on transabdominal scan need no further testing.

Women who have had a previous preterm birth, had surgery on their cervix, or a prior mid-trimester pregnancy loss are considered at a higher risk of preterm birth and should have their cervix measured transvaginally at 16, 19 and 21 weeks gestation to check for any shortening.

Other ultrasound features of the cervix are important as well. These features include the shape of the cervix and the rate at which it shortens in high-risk cases, in which serial measurements are taken over a period of weeks.

It is important to note that shortening of the cervix does not generally cause any symptoms, leaving ultrasound examination as the only means by which it can be detected with any degree of accuracy. Measurement of the cervix can be quite challenging and takes some experience to do well, particularly when measuring the cervix transvaginally.

The Western Australian Preterm Prevention Initiative is encouraging all sonographers in the state to undertake appropriate training and credentialing procedures.

Michelle Pedretti

Chief Sonographer
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Know your cervix

It is important for women considering pregnancy to be aware of their cervical screening history.

If you have a history of abnormal pap smears or human papillomavirus (HPV) tests, you should discuss this with your doctor before pregnancy.

If your risk is thought to have increased, there may be benefit from measuring the length of your cervix repeatedly, as a small proportion of women may require a stitch to be placed around the top of the cervix to help maintain normal cervical function during pregnancy.

If you are found to have a precancerous change in your cervix, and it has been recommended that you have treatment, you may wish to discuss the potential effect of the treatment upon future pregnancies with your gynaecologist.



Dr Scott White

Human papillomavirus and preterm birth

Cervical cancer screening

The vast majority of cancers of the cervix are now known to be caused by the human papillomavirus (HPV).

This virus is very common in our community, and in most individuals, is not associated with adverse health outcomes.

The cervical cancer-screening program in Australia has been very successful in identifying women with precancerous changes of their cervix related to HPV infection.

Identifying the changes which may lead to cancer and providing these women with simple treatments has halved the risk of Australian women developing cervical cancer over the past 30 years.

HPV and preterm birth

The effects of HPV go beyond cervical cancer, however, and are now known to include an increased risk of preterm birth.

Women who have had abnormal results of cervical cancer screening are, as a group, twice as likely to experience preterm birth as those with normal results.

Treatment of precancerous changes in the cervix is very important and has seen an

almost fivefold reduction in deaths from cervical cancer.

This treatment, known as LEEP, LLETZ, or cone biopsy, involves removing a small piece of the outer part of the cervix.

This has the potential to shorten the cervix, which may increase the risk of preterm birth.

It is important to remember that these treatments are of great benefit in avoiding cancer of the cervix and that the majority of women who have had such treatments will go on to have uncomplicated pregnancies.

Women may be at particular risk of preterm birth if they have had more than one cervical treatment procedure or if a deeper section of the cervix has been removed.

Even in those women who have not required treatment for precancerous changes, persistent cervical HPV infection may be associated with an increase in the risk of preterm birth.

Dr Scott White

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Knowing the length of your cervix

All women should know the length of their cervix at the time of their mid-pregnancy scan. The length of the cervix below which action is required is 35mm when measured by a transabdominal scan and 25mm when measured by a transvaginal scan. When the cervix is less than 35mm on a transabdominal scan, the next step is a transvaginal measurement. If the cervix is less than 25mm on a transvaginal scan then your doctor needs to become involved, and in most cases, natural vaginal progesterone treatment will then be prescribed.