Mid-Pregnancy Cervix Length May Predict Risk of C-Section

BY MARY ANN MOON
Contributing Writer

In primiparous women, cervical length at 22-24 weeks' gestation predicts the need for emergency cesarean delivery during labor at term, according to a study of data from more than 27,000 women in hospitals in England.

A long cervix (40-67 mm) at mid-pregnancy was associated with a high risk of intrapartum cesarean delivery at term because of failure of labor to progress, and this risk declined with a decreasing length of the cervix.

“We hypothesize that poor progress during labor at term is due to the development of the uterus at much earlier stages of pregnancy,” Dr. Gordon C.S. Smith of Cambridge University (U.K.) and his associates wrote in the New England Journal of Medicine.

Animal studies have suggested that preparation of the uterus for labor begins at relatively early stages of gestation.

To explore this issue in humans, Dr. Smith and his coinvestigators conducted a secondary analysis of data collected in a large multicenter study of pregnancy interventions.

That study, which was conducted at eight hospitals in and around London between 1998 and 2006, had included data from transvaginal ultrasound assessment of cervical length at a median of 23 weeks' gestation in 27,472 primiparous women.

A total of 5,542 of the women went on to require cesarean section, almost always because their labor failed to progress.

The rate of cesarean delivery was low (16%) among women with a cervical length in the lowest quartile at mid-pregnancy.

The rate of cesarean delivery rose significantly among women in the second quartile (18%), rose significantly again among women in the third quartile (22%), and rose significantly again among women in the highest quartile (26%) of cervical length.

“Rates of cesarean delivery started to rise at a cervical length of 25 mm and plateaued at a cervical length of 50 mm,” [almost doubling the] observed values.

The data suggests that a long cervix at mid-pregnancy is a leading cause of failure of labor progressing in children under 6. This may be possible in each of children in case of a disorder, cell or disease or genetic condition

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Drugs, Pregnancy, and Lactation

Atypical Antipsychotics in Pregnancy

While data regarding the reproductive safety of certain psychotropics such as selective serotonin reuptake inhibitors and anti-epileptic drugs have increased over the last several years, information regarding the attendant risks of fetal exposure to antipsychotics remains more sparse.

This is particularly true for the new atypical antipsychotics, which are increasingly being used in women of reproductive age for a range of psychiatric disorders in addition to schizophrenia, including bipolar disorder and depression.

It is therefore critical that clinicians and women have good information upon which to base decisions about continuing treatment during pregnancy.

There are several decades' worth of data from large studies supporting the reproductive safety of the typical antipsychotics such as haloperidol or thiothixene, but the reproductive safety data for the atypical antipsychotics are extremely sparse.

The few prospective studies on atypicals in pregnant women have been published. In a study comparing pregnancy outcomes in 151 subjects exposed to different atypicals—60 to olanzapine, 49 to risperidone, 36 to quetiapine, and 6 to clonazepam—with nonexposed controls, major malformation rates were not significantly different between the two groups (J. Clin. Psychiatry 2005;66:444-9). However, this is a relatively small sample. (The other two atypicals available are aripiprazole and ziprasidone.)

The other available safety data on atypical antipsychotics in pregnant women are derived mainly from case reports or small case series, which have not identified an increased risk for major malformations.

Most of the prospectively identified cases of exposure are to olanzapine (133), risperidone (over 500), and quetiapine (42), with very few to aripiprazole and clonazepam, and possibly none to ziprasidone. In March, some of these first-hand data on atypicals were reported at a meeting, from the Australian Pregancy Registry. Among 18 pregnancies exposed to atypical antipsychotics, there were no major malformations.

The association of the atypicals with weight gain, diabetes, and hyperinsulinemia raises another potential safety issue when these drugs are used during pregnancy. Weight gain and adiposity in pregnant women have also been associated with an increased risk of neural tube defects.

We hope that data from registries and studies on atypical antipsychotics will be collected in a timely fashion and will be made available for women and their physicians to make more informed decisions about use of this class of medicines during pregnancy.

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