INAHTA Briefs

Issue 2010/198

Title **Measuring the Length of the Cervical Canal of the Neck of the Uterus Using Transvaginal Ultrasound, Usefulness for Prediction of Spontaneous Premature Delivery**

Agency **HAS, Haute Autorité de Santé**
2, Avenue du Stade de France, F 93218 La Plaine CEDEX;
Tel : +33(0) 1 55 93 71 12, Fax : +33(0) 1 55 93 74 35;
contact.seap@has-sante.fr, www.has-sante.fr

Aim

To assess the diagnostic power of uterine neck length measurement by transvaginal ultrasound in predicting spontaneous preterm delivery.

Conclusions and results

Measuring uterine neck length by transvaginal ultrasound is predictive of spontaneous preterm delivery regardless of the population investigated. Although the sensitivity and positive predictive value of this investigation alone do not enable reliable prediction of spontaneous preterm delivery, the measurement does make it possible to estimate a level of risk for it. Hence, the utility of the measurement will depend on the risk/benefit ratio of the treatments aimed at preventing spontaneous preterm delivery.

Recommendations

HAS holds the view that measuring uterine neck length by transvaginal ultrasound can help select patients who might benefit from specific therapy, particularly in the case of:

- Symptomatic patients with signs of threatened preterm delivery
- Asymptomatic patients with an identified risk factor (uterine malformation, history of spontaneous preterm delivery, of late miscarriages, or of uterine neck surgery).

In asymptomatic patients without an identified risk factor, and in the case of dichorionic twin pregnancies, measurement of uterine neck length by transvaginal ultrasound offers no benefit.

Methods

Clinical data published between January 1999 and May 2010 were critically analyzed. The analysis included 33 studies obtained from a literature search of the Cochrane Library and MEDLINE databases. A multidisciplinary working group consisting of 4 midwives, 2 radiologists, 6 gynecologists-obstetricians, and 1 neonatologist-pediatrician discussed the results of this analysis.

Further research/reviews required

Defining a threshold below which a decision to treat is taken is of key importance. To improve accuracy in predicting spontaneous preterm delivery, studies need to better define a specific threshold as a function of term. The utility of the measurement depends on the risk/benefit ratio of the treatments envisaged. An assessment of the risks and benefits of these treatments is needed.

Written by Olivier Allaire, HAS, France