

Cervical Length and Travel Permission in Pregnant Women

Dear Editor,

As cervical length decreases, the risk of preterm birth increases.^{1,2} The risk of early birth increases exponentially with decreasing cervical length in both singleton and multiple pregnancies.³ In such women individualization of risk would lead to rationalization of antenatal care, including frequency of visit, patient education in recognizing and reporting symptoms of spontaneous preterm Labour and timely administration of steroid.³ It is also possible that in women identified as being at high risk, the rate of preterm birth might be reduced by the prophylactic use of progesterone.³ In women presenting with threatened spontaneous preterm Labour, transvaginal measurement of cervical length provides a useful distinction between those who are likely to deliver within subsequent 7 days and those who are not.³ A study of 3694 unselected finnish women scanned at 18 – 24 weeks of gestation at 25mm cutoff, the sensitivity and specificity for preterm birth before 35weeks was 7 and 92 percent respectively.⁴

In Iranian hospital of Dubai, every day many pregnant women with different nationality refer to obstetrics and Gynecology Clinic for travel certificate. From January to August 2008, transvaginal ultrasound was done to determine the length of cervix for 66 pregnant women who referred for certificate to travel. First they were sent to empty their bladder, ultrasound gel was placed on a transvaginal probe before the covering and then more ultrasound gel was placed on the cover. A small cushion was placed under the buttock for a better position. With the real time image in view, the transducer was gently placed in vagina until the cervical distance between internal and external os was determined. The relationship between the lower uterine segment and the axis of the cervical canal was categorized

as T,Y,V and U shapes. 'T' for normal relationship of the area where the endocervical canal meets the uterine cavity, whereas 'U' represented almost the complete effacement.

The age range of patients was 21-42 years old from 15 different nationalities. Gestational age was 21-35 weeks, while only one pregnant woman had a 17-week gestational age. The total cervical length measurements were 66. Sixty two cases had cervical length of ≥ 27 mm and 4 had <20 mm. In these 4 pregnant women, the relationship between lower uterine segment and the axis of the cervical canal was as follows: 1 with T, 2 with Y and 1 with V shape. In the 62 pregnant women, the relationship between lower uterine segment and the axis of the cervical canal was as follows: 57 with T and 5 with Y shape. Of these 5 women with Y shape, only one had had history of C/S in 35 weeks due to PROM in previous pregnancy, no other person had history of preterm labor pain. In 66 pregnant woman who referred just for certificate to travel, 4 had cervical length less than 20 mm (6.06%) and 2 (50%) had the Y shape. We can conclude that by measurement of cervical length before travel, the high risk pregnant women for preterm labor pain may be recognized and any unpredictable events may be prevented.

Keywords: Cervical length; Travel permission; Pregnancy

Conflict of interest: None declared.

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References

- 1 Iams JD, Goldenberg RL, Meis PJ, Mercer BM, Moawad A, Das A, Thom E, McNellis D, Copper RL, Johnson F, Roberts JM. The length of the cervix and the risk of spontaneous

premature delivery. National Institute of Child Health and Human Development Maternal Fetal Medicine Unit Network. *N Engl J Med* 1996;**334**(9):567-72. [PMID: 8569824]

- 2 doi:10.1056/NEJM199602293340904 Owen J, Yost N, Berghella V, MacPherson C, Swain M, Dildy GA 3rd, Miodovnik M, Langer O, Sibai B; Maternal-Fetal Medicine Units

Network. Can shortened midtrimester cervical length predict very early spontaneous preterm birth? *Am J Obstet Gynecol* 2004;**191**(1): 298-303. [PMID: 15295382] doi:10.1016/j.ajog.2003.11.025

3 Kagan KO, To M, Tsoi E, Nicolaides KH. Preterm birth: the value of sonographic measurement of cervical length. *BJOG* 2006;**113**(Suppl 3):52-6. [PMID: 17206965] doi:10.1111/j.1471-0528.2006.01124.x

4 Taipale P, Hilesmaa V. Sonographic measurement of uterine cervix at 18-22 weeks' gestation and the risk of preterm delivery. *Obstet Gynecol* 1998;**92**(6):902-7. [PMID: 9840546] doi:10.1016/S0029-7844(98)00346-9