



ISTHMIC-CERVICAL INSUFFICIENCY: AS A CAUSE OF PERINATAL LOSS

Duschanova Zaynab Atabayevna

Senior Lecturer, Department of Obstetrics and gynecology,
Urgench branch of Tashkent Medical Academy, Urgench, Uzbekistan

Article history:	Abstract:
<p>Received: January 11th 2022 Accepted: February 11th 2022 Published: March 30th 2022</p>	<p>The purpose of the study was to determine the prevalence of isthmic-cervical insufficiency (ICI) in women of the Khorezm region and to assess the clinical and anamnestic features of these patients.</p> <p>Material and methods. Simultaneous cross-sectional study. 343 pregnant women at 18–21 weeks of gestation were included in the study. All patients underwent transvaginal ultrasonography. Criteria for the diagnosis of CI were shortening of the detection of the cervix <25 mm and/or dilatation of the cervical canal >10 mm.</p> <p>Results. As a result of the study, it was found that the prevalence of CCI among women in the Khorezm region is 9.3 per 1000 women. At the same time, 48% of patients were asymptomatic, 14.8% had a history of surgical interventions on the cervix, 19.7% had miscarriages >14 weeks, and 10% had complicated births.</p> <p>Conclusion. The study showed a high prevalence of CI in the Khorezm region, the main risk factors should be considered surgical treatment of cervical diseases, premature birth and late miscarriages in anamnesis.</p>

Keywords: Isthmic-Cervical Insufficiency, Preterm Birth, Anamnesis, Transvaginal Ultrasonography.

Isthmic-cervical insufficiency (ICI) is due to exposure to risk factors for spontaneous accidental delivery, the incidence in the world varies from 5 to 13%. CCI complicates 0.1–1% of all pregnancy and is considered the main reason for their termination in the second trimester [1].

Assessment of risk factors for CCI is mandatory both at the preconception stage and during pregnancy in women who had a decrease in pregnancy in the second trimester or early preterm birth [3].

There is currently no specific test for diagnosing ICI outside of pregnancy. The informativeness of such tests as the assessment of the cervical canal during hysterosalpingography, the ease of insertion of Hegar dilators without resistance, the force required to remove the Foley catheter outside of pregnancy has not been proven [2]. The diagnosis of CI is often based on the likelihood other causes of preterm labor and anamnestic data on pregnancy loss in the second trimester [2]. The optimal method for diagnosing CCI during pregnancy is ultrasound cervicometry [2].

Routine screening transvaginal cervicometry of pregnant women is considered the most likely method suitable with the absence of screening as such or its effect only in the risk group for preterm birth [4]. According to international protocols, ultrasound cervicometry must be performed in all pregnant

women with singleton pregnancies and previous spontaneous preterm births [5].

AIM.

The aim of the study was to determine the prevalence of cervical insufficiency (CI) in women of the Khorezm region and assess the clinical and anamnestic features of these patients.

MATERIAL AND METHODS

In 2019, in the perinatal center of the Khorezm region, 343 preterm births (at 22–28 weeks of gestation) occurred, and all underwent cervical ultrasound screening.

Study design: cross-sectional study. Measurements include all pregnant women in 2019. cervical screening was performed. Screening was performed using transvaginal ultrasonography in the supine position with an empty bladder. The sensor was placed in the anterior fornix of the vagina, the pressure of the sensor on the cervix was minimized.

Prior to the start of the measurement, spontaneous contractions of the cervix were detected, observing for 30 s. The length of the closed part of the cervical canal is measured along a straight line drawn from the internal to the external pharynx. The duration of the study is from 3 to 5 minutes. From 3 to 6 measurements were taken, of which the smallest value



was chosen. The criteria for CCI were shortening of the cervix (SC) <25 mm and/or dilatation of the cervical canal >10 mm [5]. In patients with established ICI performed an analysis of adult and anamnestic data. We studied the features of the obstetric and gynecological history, concomitant somatic pathology, complications of pregnancy at the time of the screening.

RESULTS AND DISCUSSION

The results of the study showed that out of 343 women with preterm labor at 18–21 weeks of gestation, 29 women had echographic signs of CCI.

The average age of women was 26-32 years. The average number of pregnancies in the first group is 4.0, especially in the majority of patients were re-pregnant - 49 (54.4%). 57 (63.3%) women had a burdensome obstetric and gynecological history: abortion - in 34 (37.7%) women, non-developing pregnancy - in 28 (31.1%), spontaneous miscarriage - in 28 (31.1%)), including late spontaneous miscarriage - in 15 (16.7%), unhappy childbirth - in 9 (10%), diagnostic curettage - in 23 (25.5%), ectopic pregnancy - in 2 (2.2%) women.

Gynecological diseases in history were in 41 (45.5%) women, including external genital endometriosis - in 2 (2.2%), ovarian cysts - in 9 (10%), infertility - in 16 (17.7%), diseases of the cervix - in 28 (31.1%). Surgical treatment of diseases of the cervix in history 17 (18.8%) patients are needed. The incidence of gynecological disease between symptomatic and asymptomatic patients was not allowed.

Extragenital diseases: blood diseases (anemia) - in 34 (37.8%) patients, diseases of the gastrointestinal tract - in 15 (16.7%), diseases of the cardiovascular system, organs of vision, ENT organs, musculoskeletal apparatus - 12 each (13.3%), urinary and endocrine system - in 9 (10%) women. Thus, the most frequent somatic pathology in the studied group of women was diseases of the blood system (anemia, thrombinemia of pregnant women).

Among the complications of pregnancy, the first place is the threat of abortion 36 (40%), then - gestational anemia - in 27 (30%) women, gestational pyelonephritis - in 12 (13.3%), gestational diabetes mellitus and preeclampsia - 3 (3.3%) detections each. These data are consistent are given with literature data [7–9].

As a result of the study, it was found that the prevalence of CCI among women in the Khorezm region is 9.3 per 1000 women. At the same time, 48% of patients were asymptomatic, 14.8% had a history of surgical interventions on the cervix, 19.7% had miscarriages > 14 weeks, 10% had complicated births,

which is more than 2 times higher than the prevalence ICI according to the literature [6].

CONCLUSIONS.

Thus, the study showed a high prevalence of cervical insufficiency in the Khorezm region, the main risk factors were surgical treatment of cervical disease and preterm birth and late miscarriage in history.

LITERATURE

1. Sundtoft I., Uldbjerg N., Steffensen R., Sommer S. et al. Polymor- physiisms in genes encoding cytokines, mannose-binding lectin, collagen metabolism and thrombophilia in women with cervical insufficiency. *Ginekol Obstet Invest.* 2016; 81(1): 15–22. doi: 10.1159/000381620.
2. Brown R., Gagnon R., Delisle M.-F. cervical insufficiency and vical cerclage. *SOGC Clinical Practice Guidelines. J Obstet Gynaecol Can.* 2013; 35(12): 1115–127.
3. Diagnosis and treatment of cervical insufficiency. *Canterbury District Health Committee, April 2017*
4. Einerson BD, Grobman Washington, Miller E C Cost-effectiveness of risk-based and screening for cervical length to prevent preterm birth. *Am J Obstet Gynecol.* 2016; 215 (1): 100.e1. Epub 2016, February 12. PMID:26880732.
5. Isthmic-cervical insufficiency: clinical guidelines (treatment mental protocol) of the Ministry of Health of the Russian Federation No. 15-4/10/2-7991 dated 12/28/2018. 42 p. (in Russian)
6. Debiev F., Joskin A., Stenhout P., Bernard P. et al. Transabdominal cerclage for cervical insufficiency in twins: a series of seven cases and literature review. *J Matern Fetal Neonatal Med.* 2019, February 22: 1–5. doi:10.1080/14767058.2019.1579192.
7. Mastrolia SA, Baumfeld Y., Hershkovitz R., Yohay D., et al. IN-dependent association of intermental malformations and cervical insufficiency: a retrospective population-based cohort study. *Arch Ginekol Obst.* 2018; 297(4): 919–26. doi: 10.1007/s00404-018-4663-2.
8. Matjila M.J., Hoffman A., van der Spuy Z.M.with recurrent miscarriage - BMI - the tip of the iceberg? *Eur J Obstet Gynecol Reprod Biol.* 2017; 214:91–6. doi: 10.1016/j.ejogrb.2017.05.003.
9. Mönckeberg M., Valdes R., Kusanovich J. P., Shepeler M. et al. patients with acute cervical insufficiency without intra-amniotic infection /



World Bulletin of Public Health (WBPH)
Available Online at: <https://www.scholarexpress.net>
Volume-8, March 2022
ISSN: 2749-3644

treated with cerclage has a good prognosis. J
Perinat Med. March 8, 2019 pii: /j/jpme.ahead-
of-print/jpm-2018-0388/jpm-2018-0388.XML.
doi: 10.1515/jpm-2018-0388.