



Isthmian-Cervical Incompetence

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Transvaginal ultrasound image showing both the width and length of the funnel- from where the amniotic membrane protrudes into the internal opening- and the cervical canal length of a woman with consecutive abortions in the second trimester of pregnancy.

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26 year-old patient, gravida: 4, para: 0, abortions: 3, C-sections: 0, apparently healthy, with no relevant clinical history. Obstetric and gynecological history: 3 consecutive late abortions, the first one at 22 weeks, the second one at 18 and the last one at 16 weeks gestation, painless, no vaginal bleeding. There are no anatomical abnormalities in the uterus. She denies having had conizations and curettage, other conditions such as positive antiphospholipid antibody are ruled out. She is currently in her fourth pregnancy at 19 weeks gestation. She undergoes an endovaginal ultrasound which shows a cervical opening dilation greater than 1.5 cm with bulging membranes, length of the cervical channel less than 1.8cm. The diagnosis of cervical isthmian incompetence was carried out. McDonald cerclage was also performed, achieving a pregnancy of 35 weeks gestation.

Isthmian-cervical incompetence is the inability to retain a functional pregnancy before the uterus reaches a size at term¹. It is the leading cause of repeated abortions, late abortions, immature and premature deliveries at the isthmus and cervix level. It is a complication that occurs in 1% of all pregnancies, and its true prevalence is about 0.005-2%.

Clinically, it presents with painless cervical dilation and a delivery between 16 and 28 weeks of gestation with rupture of membranes; expelling a living fetus.² Among the etiological factors are: the posttraumatic anatomical disruption of the internal os, congenital malformations or cone biopsy,

bicornuate uterus, septate uterus, double uterus, previous traumatic birth and forced dilation curettage.

Mid-cervical length decreases during pregnancy, from 4 cm at 16 weeks to almost 3cm at 34 weeks (normal mean cervical length in the middle of the third quarter is 3.4 to 3.7cm); the risk of preterm delivery increases if the cervix is less than 3 cm¹.

There is a significant increase in the risk of preterm labor when there is dilation of the internal os (the funnel width) greater than 1.5cm, functional cervical length (channel length) less than 1.8 cm and length of the internal os dilatation greater than 50 % of the length of the cervix. The gestational age at which cervical changes can be seen is after 18.7 weeks.³

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