

IMPORTANCE OF EARLY DIAGNOSIS OF URINARY TRACT INFECTION IN PREGNANT WOMEN IN PREVENTING PREMATURE BIRTH

Renata Araújo Varela Ayres de Melo

Student of Medicine, at Centro Universitário
Maurício de Nassau, Recife, PERNAMBUCO,
Brazil

Katia Maria de Melo Machado

Obstetrician Gynecologist, Master by
``Universidade de Pernambuco`` and
PhD from ``Universidade Federal de
Pernambuco``, Recife, PERNAMBUCO,
Brazil

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Thematic axis: Maternal and child health assistance

INTRODUCTION

Pregnancy is a period of intense anatomical changes, which can contribute to an increase in urinary infections^{1,4,5}. This, if complicated, can lead to premature birth^{1,2,3,4}. That said, early diagnosis is important, and consequently early treatment, to avoid this unfavorable outcome^{4,5}.

OBJECTIVE

Describe the pathophysiological mechanism of urinary infection in pregnant women that can lead to premature birth and discuss the importance of early diagnosis in this situation.

METHODOLOGY

Literary review, searching for scientific productions in the Scielo database and protocol of the Brazilian Federation of Gynecology and Obstetrics Associations of publications from 2008 to 2021, with restricted Portuguese language, through the descriptors “Urinary infection in pregnancy”, “Urinary infections”, “Infectious complications in pregnancy” and “Prenatal care and urinary tract infection”.

RESULTS AND DISCUSSION

Pregnancy is a period of bodily changes due to biochemical, endocrine-metabolic and mechanical factors, resulting from the relaxing action of prostacyclin and progesterone, the physiological increase in renal plasma flow and uterine dextrorotation, causing compressive mechanical action on the urinary tract^{1,2,4,5}. These changes will lead to urinary stasis, concentrated in nutrients,

favoring the proliferation of microorganisms and infection⁴. The most common bacteria are *Escherichia coli*, *Enterobacter sp.*, *Klebsiella sp.*, *Pseudomonas sp.*, Group B *Streptococcus*, among others, but the first is more prevalent^{1,4,5}. Some patients have no symptoms, however, if not diagnosed and treated, they can progress to symptomatic forms, such as cystitis or pyelonephritis². During infection, the production of chemocytokines and phospholipases A2 and C will occur, in addition to the colonization of amniotic fluid, which activate prostaglandins E2 and F2-alpha that initiate labor^{3,4}. Prenatal screening must be carried out for early detection of the asymptomatic form, using urine culture, which is the gold standard test^{2,3,4}. You can also request a urinalysis, nitrite test, leukocyte esterase and urinary tract ultrasound⁴. The purpose of early detection is to prevent the infection from becoming more complicated and leading to premature birth^{4,5}.

CONCLUSION

Given the high frequency of urinary infections during pregnancy, due to changes in the woman's body, and the complication of premature birth, shows the importance of early detection so that appropriate treatment can begin^{1,2,4,5}. Its diagnosis is clinical and with complementary tests, such as urine culture^{2,4}. Asymptomatic pregnant women are also subjected to screening tests as prophylaxis for premature labor⁴.

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