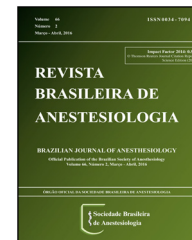REVISTA BRASILEIRA DE ANESTESIOLOGIA

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SCIENTIFIC ARTICLE

Low back pain during pregnancy

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Abstract
Objective: Low back pain is a common complaint among pregnant women. It is estimated that about 50% of pregnant women complain of some form of back pain at some point in pregnancy or during the postpartum period. The aim of this study was to evaluate the frequency of low back pain during pregnancy and its characteristics.
Methods: Cross-sectional study with low-risk pregnant women. After approval by the Human Research Ethics Committee and receiving written informed consent, we included pregnant women over 18 years of age and excluded those with psychiatric disorders, previous lumbar pathologies, and receiving treatment for low back pain.
Results: We interviewed 97 pregnant women. The frequency of low back pain was 68%. The mean age was 26.2 years and the median gestational age was 30 weeks. Fifty-eight pregnant women declared themselves as brown (58%). Most (88.6%) were married or living in common-law marriage, 56 (57.7%) worked outside the home, and 71 (73.2%) had completed high school. Low back pain was more frequent during the second trimester of pregnancy (43.9%), referred to as a ''burning'' sensation in 37.8% of patients, with intermittent frequency in 96.9% of the women. The symptoms got worse at night (71.2%). Resting reduced low back pain in 43.9% of pregnant women, while the standing position for a long time worsened it in 27.2% of patients.
Conclusion: Low back pain is common in pregnant women, has specific characteristics, and is more frequent in the second trimester of pregnancy. This indicates the need for prevention strategies that enable better quality of life for pregnant women.
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PALAVRAS-CHAVE
Lombalgia;
Frequência e
características da
lombalgia;
Gestantes

Lombalgia na gestação

Resumo

Objetivo: A lombalgia é uma queixa comum entre grávidas. Estima-se que cerca de 50% das gestantes queixam-se de algum tipo de dor lombar em algum momento da gravidez ou durante o puerpério. O objetivo deste estudo foi avaliar a frequência da lombalgia na gestação e suas características.

Método: Estudo de corte transversal com gestantes de baixo risco. Após a aprovação pelo Comitê de Ética em Pesquisa em Seres Humanos e a assinatura do termo de consentimento livre e esclarecido, foram incluídas maiores de 18 anos e alfabetizadas e excluídas gestantes com distúrbios psiquiátricos, com patologias lombares prévias e em tratamento para dor lombar.

Resultados: Foram entrevistadas 97 gestantes. A frequência de dor lombar foi 68%. A média de idade foi 26,2 anos e a mediana da idade gestacional de 30 semanas; 58 consideraram-se pardas (58%). A maioria (88,6%) era casada ou vivia em união estável, 56 (57,7%) trabalhavam fora e 71 (73,2%) tinham o ensino médio completo. A lombalgia foi mais frequente durante o segundo trimestre gestacional (43,9%), referida como ''em queimação'' por 37,8% das pacientes e com frequência intermitente em 96,9%. Os sintomas pioravam no período noturno (71,2%). O repouso reduzia a dor lombar em 43,9%, enquanto a posição ortostática por longo tempo agravava em 27,2%.

Conclusão: A lombalgia é comum em gestantes, apresenta características específicas e é mais frequente no segundo trimestre. Isso alerta para a necessidade de serem instituídas estratégias de prevenção que possibilitem melhor qualidade de vida para a gestante.

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Introduction

Low back pain is usually defined as the axial or parasagittal discomfort in the lower back region. It is essentially musculoskeletal and may be due to a combination of mechanical, circulatory, hormonal, and psychosocial factors.[1]

It is a common complaint among pregnant women.[1] It is estimated that about 50% of pregnant women complain of some sort of back pain at some point in pregnancy or during the postpartum period.[2]

The etiology of pregnancy-specific low back pain is not well defined.[3] From a biomechanical standpoint, the center of gravity moves forward due to the increase in the abdomen and breasts, which leads to posture changes, such as reduction in plantar arch, knee hyperextension, and pelvic anteversion. These changes generate stress in the lumbar lordosis and consequent tension in the paraspinal muscles. The compression of great vessels by the gravid uterus decreases spinal blood flow and may cause low back pain, particularly in the last half of pregnancy.[4] Significant water retention determined by progesterone stimulation[5] and ligamentous laxity by relaxin secreted from the *corpus luteum* may also be seen, leaving the lumbar spine and hip joints less stable and therefore more susceptible to stress and pain.[4]

Some risk factors related to low back pain during pregnancy have been reported,[6] including low back pain during the menstrual period and previous history of low back pain. Regarding age, it is known that the younger the patient, the greater the chance of developing pregnancy-related low back pain.[6,7] Another factor related to low back pain is the increased weight, which results in sacroiliac joint instability, in addition to increased spinal flexibility and consequent onset or worsening of low back pain.[7,8]

Most prevalence studies confirm that low back pain during pregnancy is a major complaint due to the high frequency of affected women and the severity and discomfort caused by pain.[5] Besides influencing negatively the quality of sleep, physical condition, performance at work, social life, household activities, and leisure,[5] it causes economic losses due to absenteeism.[9,10] Based on the above, the objective of this study was to evaluate the frequency of low back pain during pregnancy and its features.

Method

A cross-sectional cohort study was performed involving pregnant women, from the first to third trimester of pregnancy, attending the prenatal low-risk program at the Center for Women Care (CWC) of the *Instituto de Medicina Integral Professor Fernando Figueira* (IMIP) who agreed to participate in the study.

The project was approved by the IMIP Ethics Committee, No. 23173313800005201. Data were collected from December 2013 to January 2014. A list of questions determined by the researchers and the database filled by them with the responses were used as tools. The questionnaire was composed of simple and direct questions, including the pregnant woman personal data, such as age, weight, occupation, and information related to pregnancy and presence or absence of low back pain and its peculiarities.