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Pregnancy-related pelvic girdle pain (PPP), I: Terminology, clinical presentation, and prevalence

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Abstract Pregnancy-related lumbopelvic pain has puzzled medicine for a long time. The present systematic review focuses on terminology, clinical presentation, and prevalence. Numerous terms are used, as if they indicated one and the same entity. We propose “pregnancy-related pelvic girdle pain (PPP)”, and “pregnancy-related low back pain (PLBP)”, present evidence that the two add up to “lumbopelvic pain”, and show that they are distinct entities (although underlying mechanisms may be similar). Average pain intensity during pregnancy is 50 mm on a visual analogue scale; postpartum, pain is less. During pregnancy, serious pain occurs in about 25%, and severe disability in about 8% of patients. After pregnancy, problems are serious in about 7%. The mechanisms behind disabilities remain unclear, and constitute an important research priority. Changes in muscle activity, unusual perceptions of the leg when moving it, and altered motor coordination were observed but remain poorly understood. Published prevalence for PPP and/or PLBP varies widely.

Quantitative analysis was used to explain the differences. Overall, about 45% of all pregnant women and 25% of all women postpartum suffer from PPP and/or PLBP. These values decrease by about 20% if one excludes mild complaints. Strenuous work, previous low back pain, and previous PPP and/or PLBP are risk factors, and the inclusion/exclusion of high-risk subgroups influences prevalence. Of all patients, about one-half have PPP, one-third PLBP, and one-sixth both conditions combined. Overall, the literature reveals that PPP deserves serious attention from the clinical and research communities, at all times and in all countries.

Keywords Pregnancy · Pelvic girdle · Low back pain · Prevalence · Review

Introduction

Pregnancy-related lumbopelvic pain has puzzled medicine for a long time. More than 2,000 years ago, Hippocrates (c. 460–c. 377 B.C.) theorised that an irreversible

relaxation and widening of the pelvis occurs with the first pregnancy [50], the resultant instability of the sacroiliac joints leading to symptomatic inflammation [94].

Recent literature suggests that around half of all pregnant women incur lumbopelvic pain [7, 31, 35, 62,