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Original article

Pregnancy outcomes in dermatomyositis and polymyositis patients

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ABSTRACT

Background: Currently, there are few studies that describe pregnancy in dermatomyositis/polymyositis patients, and they are largely limited to case reports or studies with few samples.

Objectives: Therefore, we describe the pregnancy in a large sample of patients with dermatomyositis/polymyositis and to analyze the outcomes in those who became pregnant during or after disease onset.

Methods: The present single-center study analyzed 98 female patients with idiopathic inflammatory myopathies (60 dermatomyositis and 38 polymyositis patients). They were interviewed to obtain obstetric antecedent and demographic data from June 2011 to June 2012.

Results: Seventy-eight (79.6%) of the 98 patients had obstetric histories. Six polymyositis and 9 dermatomyositis patients became pregnant after disease onset. The pregnancy outcomes in these cases were good, except in the following cases: 1 disease reactivation, 1 intrauterine growth retardation, 1 diabetes mellitus, 1 hypertension, 1 hypothyroidism, and 2 fetal losses (same patient). Moreover, 2 patients developed dermatomyositis during pregnancy and 4 (2 polymyositis and 2 dermatomyositis) during the postpartum period with good control after glucocorticoid and immunosuppressant therapy.

Conclusions: The adverse obstetric events were related to clinical intercurrences and the pregnancy does not seem to carry a worse prognosis specifically in disease (for example: disease relapsing). Moreover, dermatomyositis or polymyositis onset during pregnancy or the postpartum period had good outcome after drug therapy.

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Desfechos da gestação em pacientes com dermatomiosite e polimiosite

Palavras-chave:
Dermatomiosite
Miopatias inflamatórias
Intercorrências obstétricas
Polimiosite
Gestação

RESUMO

Introdução: Há poucos estudos que descrevem a gravidez em pacientes com dermatomiosite/polimiosite. São, em grande parte, limitados a relatos de casos ou estudos com amostras pequenas.

Objetivos: Analisar a gestação em uma grande amostra de pacientes com dermatomiosite/polimiosite e os desfechos naquelas que engravidaram durante ou depois do início da doença.

Métodos: Foram analisados 98 pacientes do sexo feminino com miopatias inflamatórias idiopáticas (60 com dermatomiosite e 38 com polimiosite). Elas foram entrevistadas entre junho de 2011 e junho de 2012 para coletar seus antecedentes obstétricos e dados demográficos.

Resultados: Tinham antecedentes obstétricos 78 (79,6%) das 98 pacientes. Seis pacientes com polimiosite e nove com dermatomiosite engravidaram após o início da doença. O desfecho da gravidez nessas pacientes foi bom, exceto nos seguintes casos: um de reativação da doença, um de retardo do crescimento fetal, um de *diabetes mellitus*, um de hipertensão arterial, um de hipotireoidismo e dois de aborto (mesma paciente). Além disso, duas pacientes desenvolveram dermatomiosite durante a gravidez e quatro (duas polimiosite e duas dermatomiosite) durante o período pós-parto, com bom controle a seguir com glucocorticoides e terapia imunossupressora.

Conclusões: Os eventos obstétricos adversos estiveram relacionados com as intercorrências clínicas e a gravidez não parece levar especificamente a um pior prognóstico na doença (por exemplo: recidiva). Além disso, a dermatomiosite ou polimiosite de início durante a gestação ou no período pós-parto apresentou boa evolução depois do tratamento farmacológico.

Introduction

Dermatomyositis (DM) and polymyositis (PM) are systemic inflammatory autoimmune myopathies characterized by the subacute onset of symmetric weakness in the proximal musculature. Furthermore, cutaneous manifestations, such as heliotrope rash and Gottron's papules, are present in DM. Additionally, extra-muscular manifestations, such as articular, cardiorespiratory and gastrointestinal abnormalities may be found in both diseases.[1,2] The annual incidence of DM/PM is 0.5–8.4 cases per million habitants, affecting twice as many women as men, with no racial predilection. The DM affects both children and adults, whereas PM is seem after the forth decade of life and very rarely in childhood.[3–5]

Various studies conducted worldwide have assessed pregnancy in systemic rheumatic diseases. In systemic lupus erythematosus, for example, the maternal mortality risk is 20 times higher than that of a healthy pregnant female. These women also have a high risk of cesarean delivery, preterm labor, preeclampsia, thromboembolic events, and infectious and hematological complications.[6] For rheumatoid arthritis, various studies have shown improvement of symptoms during pregnancy.[7] However, especially in active rheumatoid arthritis, there is a slight increase in the rate of children with decreased birth weight and gestational age.[8]

Currently, there are few studies that describe pregnancy in DM/PM patients, and they are largely limited to case reports or studies with small samples.[9–27] Thus, little is known about the effects of pregnancy on DM/PM, whether these patients find it harder to conceive or if pregnancy outcomes are adversely affected by myositis. Herein, we evaluate pregnancy in a large sample of DM/PM patients and describe the outcomes in those who became pregnant during or after disease onset.

Materials and methods

The present retrospective cohort study was performed at a single center and included 98 consecutive DM/PM patients (≥18 years old) from June 2011 to June 2012. All patients met at least four of the five Bohan and Peter criteria items,[28] and they were regularly following at our myopathy unit of our tertiary care center from 1993 to 2012. Patients with other associated systemic autoimmune disease were not included in the present study.

The study was approved by the local ethics committee, and all of the study participants signed an informed consent form.

All of the participants underwent a standardized interview, and their medical charts were extensively reviewed. The following data were collected: basic demographic data, age of disease onset, treatment, number of pregnancies before and after disease onset, activity of the disease during pregnancy and pregnancy outcomes.

Therapy

The patients were initially treated with corticosteroids (oral prednisone, 1 mg/kg/day), with later gradual dose reduction according to clinical and laboratory stability. When