Skin conditions during pregnancy

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Acknowledgements:
This paper is partly
supported by the Sectorial
Operational Programme
Human Resources
Development (SOPHRD),
financed by the European
Social Fund
and the Romanian
Government
under the contract number
POSDRU 141531.

Abstract

Skin conditions during pregnancy could lead to many adverse and outcome effects on fetus. In this respect, the choice regarding the various topical and systemic treatments that could be used in pregnancy should be based on each patient skin condition (e.g. topical corticoids which are currently used in itching). Furthermore, hormonal behavior during pregnancy could have a higher impact involving striae gravidarum, intrahepatic cholestasis of pregnancy and pemphigoid gestationis. There are also many other skin conditions that could lead to itching, such as dermatitis, psoriasis or fungal infections. Most of these conditions could be spontaneously resolved postpartum, but specific treatments may be required during pregnancy. For skin pregnancy conditions, an interdisciplinary management by dermatologists, hepatologists, gynecologist and pediatricians should be recommended.

Keywords: skin condition, pregnancy, hormone, gravidarum, cholestasis, pemphigoid

Introduction

Itching affects usually more than 10% of pregnant women⁽¹⁾. These conditions could be more severe and may lead to dry skin especially during pregnancy. Most of these comprise striae gravidarum, intrahepatic cholestasis of pregnancy including pemphigoid gestationis. Surprinsingly, the differential diagnosis become very important and a clear management should be carried out by a multidisciplinary team that includes an obstetrician, a dermatologist, and a gastroenterologist^(2,3).

In the present review we focus on the main skin pregnancy conditions involving striae gravidarum, intrahepatic cholestasis of pregnancy, and pemphigoid gestations.

Striae gravidarum

Striae gravidarum also known as stretch marks occur usually in pregnancy by the third trimester⁽⁴⁾. This condition presents a pink-purple colour in the form of an abdomen bands, being present in a patients with a family history of striae⁽⁵⁾. Many factors are contributing to such conditions, especially hormonal and stretching of the skin. In this regard, numerous creams are used to prevent strae consition. However, until present there is no evidence that these treatments are effective^(6,7). Postpartum treatments include topical or oral tretinoin therapy⁽⁸⁾. However, neither of these products is widely used, and the safety of using these components during pregnancy is still under debate. Further studies are needed before these treatments should be recommended^(8,9).

Intrahepatic cholestasis

Intrahepatic cholestasis (IC) during pregnancy also called idiopathic jaundice of pregnancy, it is known as a pruritic condition in pregnancy which involves many different skin changes and conditions. Usually, it is cau-

sed by the disruption of hepatic bile flow and the early identification of such condition could lead to prevent other potential adverse effect on fetal changes⁽¹⁰⁾. The itching is a common symptom in this confition and is more intense in the end of the pregnancy, involving palms and soles⁽¹¹⁾.

IC is a hormonally triggered cholestasis and usually occurs in genetically predisposed patients which present an dysfunction in the excretion of bile acids. This leads further to more severe itching, as toxic bile acids can pass into fetal circulation, might have harmful effects on the fetus and more severe itching⁽¹²⁾.

The diagnosis is usually made based on the characteristic symptom starting from the palms and soles, which can be confirmed by a rise in the total serum bile acid levels. It was noticed that in women with IC, the presence of the total serum bile acid levels of more that 40.0 $\mu mol/L$ is usually associated with a higher risk of adverse fetal outcomes $^{(13)}$. These could be also accompanied by higher levels of the liver transaminase levels. Important to be note, that the intrapartum hemorrhage could also occur when vitamin K deficiency appear, being associated with adverse fetal outcomes $^{(14)}$. Therefore, in this regard a specific diagnosis and therapy are necessary.

Pemphigoid gestationis

Pemphigoid gestationis or herpes gestationis, is an autoimmune skin condition which occurs most of the time in the last trimester of pregnancy and being rarely associated with choriocarcinoma⁽¹⁵⁾. Therefore, some patients present also a higher risk of other autoimmune diseases, being associated with the dermoepithelial junction and a different course of appearance⁽¹⁶⁾. The fetal risk was not taken into account, although immunoglobulin G autoantibodies could pass the placenta, and therefore newborns could achieve urticarial or

Received: October 24, 2014 Revised: November 12, 2014 Accepted: November 17, 2014 vesicular lesions⁽¹⁷⁾. Moreover, antenatal surveillance should be also recommended⁽¹⁸⁾. Usually, the patients could be treated with oral antihistamines and systemic topical corticosteroids, in comparison with the patients who present more severe symptoms. The differential diagnosis includes papular urticarial papules and plaques of pregnancy (a skin condition of pregnancy in which the lesions occur usually in the striae, unlike pemphigid gestationis, in which the lesions occur in the periumbilical area), dermatitis herpetiformis and erythema multiforme due to either pregnancy or various drugs.

Future Perspectives

Skin conditions in pregnancy require taking a patient history, differential diagnosis and complete examination. Furthermore, laboratory studies might be indicated in order to determine the most likely diagnosis. In determining the accurate diagnosis the increased risk of adverse fetal outcome should also be taken into consideration. Early recognition and timely delivery are of paramount importance towards a successful perinatal outcome; the prevention and prediction of fetal death still remain a challenge in severe cases.

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