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ORIGINAL ARTICLE

A PROSPECTIVE STUDY ON DERMATOSES IN PREGNANCY IN A TERTIARY CARE HOSPITAL OF SOUTHERN ASSAM

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ABSTRACT: Various skin diseases are seen in pregnancy. Some of these diseases occur specifically in pregnancy. Maternal and fetal morbidity and mortality can be decreased by early diagnosis and appropriate treatment of these conditions. A total of 53 pregnant females were found to have dermatological disorders or sexually transmitted diseases during the study period. The commonest pregnancy specific dermatoses in the study was polymorphic eruption of pregnancy (22.64%) followed by prurigo of pregnancy (9.43%), pruritic folliculitis of pregnancy (5.66%), pruritus gravidarum (0.01%), impetigo herpetiformis (0.01%) and pemphigoid gestationis (0.01%). The commonest dermatological disorder was scabies (13.20%) followed by candidiasis (11.32%), dermatophytosis (9.43%), melasma (5.66%) and equal number of cases of urticaria (3.7%) and acne (3.7%). Among sexually transmitted diseases, commonest disease was genital warts (3.7%) followed by single case (0.01%) each of syphilis, molluscum contagiosum and one patient was seropositive for HIV.

KEYWORDS: Pregnancy, Dermatoses, Polymorphic Eruption of Pregnancy.

INTRODUCTION: Pregnancy is characterized by endocrine, metabolic and immunologic alterations resulting in physiologic and pathologic skin changes.[1] These changes range from those occurring with almost all pregnancies to common diseases that are not related to pregnancy, to eruptions specifically related to pregnancy.[2] We undertook this study to determine the incidence of the dermatoses specific to pregnancy, common dermatologic diseases occurring in pregnancy as well as sexually transmitted diseases occurring in pregnant females.

MATERIALS AND METHODS: All pregnant females attending dermatology outpatient department of a tertiary care centre in southern Assam from August 2014 to July 2015 enrolled in the study. Clearance from ethical committee and written informed consent was taken from all patients. Detailed history including patient particulars, chief complaints related to skin, onset (In relation to duration of pregnancy), duration of complaint, presence of itching and skin lesions, vaginal discharge, jaundice, past or family history of similar lesions, exacerbating factors, associated comorbid condition etc. was recorded. Complete cutaneous examination was done according to preset pro forma. Laboratory investigations were done to confirm diagnosis as per requirement. Screening with VDRL and ELISA for HIV was done in all cases. In case of STDs, examination of contact was done.

RESULTS: A total of 53 pregnant females were enrolled in the study. The age group most commonly affected was between 21-30 years. There were 24 (45.28%) primigravida and 29 (54.71%) multigravida in our study. Pruritus was the commonest complaint.

The commonest pregnancy specific dermatoses was polymorphic eruption of pregnancy accounting for 12 (22.64%) cases, prurigo of pregnancy accounting for 5 (9.43%) cases, pruritic

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folliculitis of pregnancy accounting for 3 (5.66%) cases followed by single case (0.01%) each of impetigo herpetiformis, pruritus gravidarum and pemphigoid gestationis.

Sr. no.	Specific Pregnancy Dermatoses	No.	%
1	Polymorphic eruption of pregnancy	12	22.64
2	Prurigo of pregnancy	5	9.43
3	Pruritic folliculitis of pregnancy	3	5.66
4	Pruritus gravidarum	1	0.01
5	Impetigo herpetiformis	1	0.01
6	Pemphigoid gestationis	1	0.01

Table 1: Showing incidence of specific dermatoses of pregnancy

Sr. no.	Dermatological Disorder	No.	%
1	Scabies	7	13.20
2	Dermatophytosis	5	9.43
3	Candidiasis	6	11.32
4	Urticaria	2	3.7
5	Melasma	3	5.66
6	Acne	2	3.7

Table 2: Showing incidence of dermatological disorders

Sr. no.	STD	No.	%
1	Condylomata acuminata	2	3.7
2	Syphilis	1	0.01
3	Molluscum contagiosum	1	0.01
4	HIV	1	0.01

Table 3: Showing incidence of sexually transmitted diseases (STD) in pregnancy

Of the 5 patients who suffered from sexually transmitted diseases, 2 (3.7%) had genital warts, 1(0.01%) was seropositive for HIV and single (0.01%) patient each of syphilis and molluscum contagiosum.

The commonest dermatological disorder was scabies (13.20%). Dermatophytosis, candidiasis, urticarial, melasma and acne accounted for rest of the cases.

DISCUSSION: In our study, pruritus was the commonest symptom which is similar to findings reported in other studies.[3],[4],[5] The commonest age group affected was between 21-30 years of age. The commonest pregnancy specific dermatoses in our study was polymorphic eruption of pregnancy (PEP) which is similar to findings by Puri and Puri.[3] However, much lesser incidence of PEP has been reported in other studies.[4][5] It is an extremely pruritic condition occurring toward the end of third trimester. Erythematous urticarial papules and plaques develop, initially on the abdomen especially within the striae distensae and spread onto thighs, buttocks and arms. Rarely, lesions may be seen in the upper half of the trunk and never seen on the face. Barring intense pruritus, there are no systemic symptoms. Maternal and fetal morbidity and mortality are not increased. Topical corticosteroids and

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antihistamines are used for treatment; although systemic corticosteroids may be required in severe cases.[7]

Fig. 1: Condylomata acuminata

The 2nd most common pregnancy specific dermatosis was prurigo of pregnancy accounting for 9.43% cases in our study. It has been found to be the most common pregnancy specific dermatoses in many studies.[4][5][6] Also known as atopic eruption of pregnancy, it is defined as either an exacerbation or the first occurrence of eczematous and/or popular skin changes during pregnancy in atopic individuals.[8] Atopic eruption of pregnancy appears earlier than other pregnancy specific dermatoses.[9] Most patients develop eczematous lesions often involving face, neck and flexural aspects of extremities, whereas some develop a popular eruption on the extremities and trunk composed of small erythematous papules or classic prurigo lesions.

In our study, pruritic folliculitis of pregnancy accounted for 3.7% cases. It appears in the 2nd or 3rd trimester of pregnancy and disappears most commonly in the first few weeks of postpartum period.[10] Edematous, erythematous and pruritic follicular papules are characteristic of such eruption.[11]

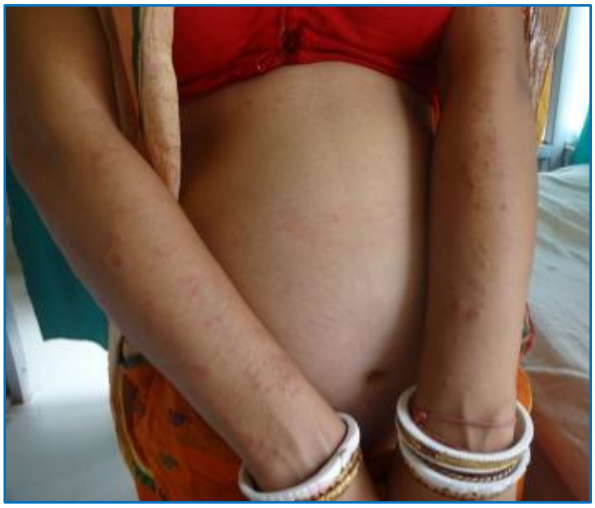

Fig. 2: Pruritic folliculitis of pregnancy

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Of the remaining cases of pregnancy specific dermatoses, 1 case each was accounted by pruritus gravidarum, impetigo herpetiformis and pemphigoid gestationis.

Pruritus gravidarum also known as intrahepatic cholestasis of pregnancy most commonly occurs in the last trimester and is characterized by generalized pruritus, anorexia, nausea and vomiting. There may be icterus which is dependent on hepatic excretory function. Cholestasis as well as symptoms subside during postpartum period but may recur during subsequent pregnancies.[7]
Impetigo herpetiformis is a form of pustular psoriasis associated with pregnancy. It is generally seen during the last trimester and is associated with systemic symptoms and high fetal and maternal mortality.[7]

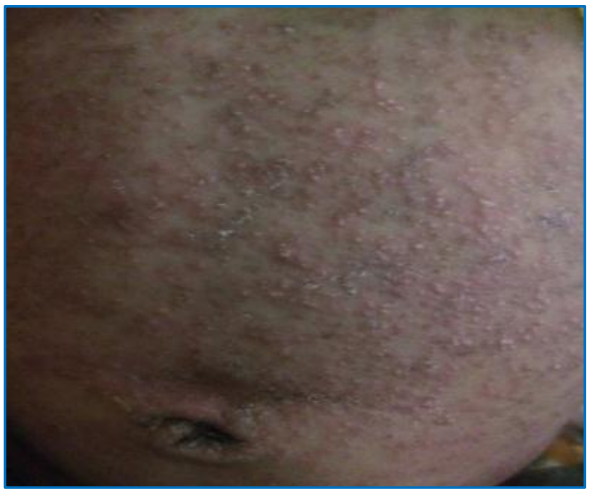

Fig. 3: Pustules seen over an erythematous base in a case of impetigo herpetiformis

Herpes gestationis is clinically characterised by papules, plaques, vesicles and bullae which may occur anywhere on the skin's surface. It may occur at any time during pregnancy. Severe itching may be present.[7]

CONCLUSION: Pruritic eruptions in pregnancy can be distressing. These cases require appropriate treatment.

REFERENCES:

1. Karen JK, Pomeranz MK. Skin Changes and Diseases in Pregnancy. In: Goldsmith LA, Katz SI,Gilchrest BA, Paller AS, Leffell DJ, Wolff K,editors. Fitzpatrick's Dermatology in General Medicine, 8th ed. New York: McGraw Hill, 2012.p.1204-1212.
2. Kroumpouzos G, Cohen LM. Dermatoses of pregnancy. J Am Acad Dermatol 2001; 45: 1-19.
3. Puri N, Puri A. A study on dermatoses of pregnancy. Our Dermatol Online 2013; 4: 56-60.
4. Shivkumar V, Madhavamurthy P. Skin in pregnancy. Indian J Dermatol Venereol Leprol 1999; 65: 23-5.
5. Raj S, Khopkar U, Kapasi A, Wadhwa SL. Skin in pregnancy. Indian J Dermatol Venereol Leprol 1992; 58: 84-8.
6. Hassan I, Bashir S, Taing S. A clinical study of the skin changes in pregnancy in Kashmir valley of north India: A hospital based study. Indian J Dermatol 2015; 60: 28-32.

7. Fine JD, Moschella SL. Diseases of Nutrition and Metabolism. In: Moschella SL, Hurley HJ. editors. Dermatology, 2nd ed. Philadelphia. WB Saunders, 1985. p. 1422-1532.
8. Ambos-Rudolph CM, Shornick JK. Pregnancy Dermatoses. In: Bolognia JL, Jorrizo JL, Schaffer JV,editors.Dermatology,3rd ed. Philadelphia: Elsevier saunders; 2012.p.439-448.
9. Ambos-Rudolph CM, Mullegger RR, Vaughan-Jones SA, et al. The specific dermatoses of pregnancy revisited and reclassified. Results of a retrospective two-centre study on 505 pregnant patients. J Am Acad Dermatol.2006; 54: 395-404.
10. Zoberman E, Farmer ER. Pruritic folliculitis of pregnancy. Arch Dermatol. 1981; 117: 20–2.
11. Sharma R. Skin and Pregnancy. In: Valia RG, Valia AR, editors. IADVL Textbook of Dermatology, 3rd ed. Mumbai: Bhalani; 2008.p.1432-1437.

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