SKIN IN PREGNANCY

V Shivakumar, P Madhavamurthy

Screening for skin and sexually transmitted diseases was undertaken in 170 pregnant women in all the trimesters of pregnancy. Pruritus was the commonest presenting symptom (58.82%). Candidiasis (21.78%) was the commonest cause of white discharge per vagina. Condylomata acuminata (4.70%) was the commonest sexually transmitted disease. Three patients (1.76%) were seropositive for HIV infection. The commonest dermatological disorder observed was scabies (17.64%) while 48 other diseases accounted for less than 10% each.

Key words : Pregnancy, Dermatoses, Skin

Introduction

During gestation both physiologic and pathologic changes can occur in the skin, nails, and hair shafts.[1] Gravidas are susceptible to the same skin disorders as are non-pregnant women. There are also several pregnancy specific skin disorders which are important to recognise.[2] The skin is affected in various ways during pregnancy. Previously normal skin may show changes, pre-existing dermatoses may become aggravated, improved or be unaffected.[3] This study was undertaken to ascertain the incidence of various dermatoses in pregnant women and the influence of pregnancy on the course of various dermatoses.

Materials and Methods

The study material comprised of 170 consecutive cases of pregnant women with skin diseases attending the department. A detailed history was elicited with reference to presenting disease and its relation to pregnancy. A thorough clinical examination was performed to note all physiological and pathological muco cutaneous changes. In all cases routine blood, urine and stool examination was done. In all sexually transmitted diseases, VDRL and ELISA tests for HIV were done. In patients with white discharge, a KOH mount, saline mount and Gram stain were done.

From the Department of Dermatology, Venereology and Leprology, JJM Medical College, Davangere - 577004, India

Address correspondence to :

Dr. V. Shivakumar
No. 66, 11th Cross Indira Nagar, Ist stage, Bangalore - 560038

Results

The 170 study cases accounted for 0.59% of the total attendance of the department. Majority belonged to the age group of 11-20 (49.41%). An almost equal incidence of primigravidas, 86 cases (50.58%) and multigravidas, 84 cases (49.41%) was found. Third trimester attendance accounted for 105 cases (61.76%), second trimester for 46 cases (27.5%) and first trimester for 19 cases (11.17%).

Pruritus was the commonest symptom accounting for 100 cases (58.82%) while pain accounted for 21 cases (12.35%). Fifty-six patients complained of white discharge per vagina, the causes being vaginal candidiasis in 21.78%, trichomoniasis in 8.23% and bacterial vaginosis in 1.17%.

Of 18 patients (Table I) who suffered from sexually transmitted diseases, 8 (4.70%) had condylomata

acuminata. Four patients (2.34%) had syphilis and 3 HIV infection.

Table I. Analysis of sexually transmitted diseases

Disease	No.of Patients	%
Condylomata acuminata	8	4.70
Molluscum contagiosum	2	1.17
Syphilis		
Primary	2	1.17
Secondary	2	1.17
Herpes progenitalis	2	1.17
HIV seropositive	3	1.76

Table II. Analysis of pigmentation and striae

Pigmentation	Number of Patients	Percentage of 170
External genital	168	98.82
Periareolar	139	81.76
Linea nigra	97	57.02
Melasma	18	10.58
Others	3	1.76
Striae :	2	1.17
Abdomen	113	66.47
Thighs	49	28.82
Hips	7	4.11
Breast	5	2.94

Of the disorders specific to pregnancy, 16 (9.41%) had prurigo of pregnancy, 6 (3.52%) had pruritus gravidarum and 4 (2.35%) had polymorphic eruption of pregnancy.

The commonest dermatological disorder was scabies (17.64%), while 48 other diseases accounted for less than 10% each.

Pigmentary changes and striae were as noted in tableII.

Discussion

Pruritus was the commonest symptom accounting for 58.82% of the patients. According to Winton et al, pruritus from all causes may occur in 17% of pregnant women.[1] Wong et al and Roger et al reported incidence of pruritus in 20% and 18% respectively of all pregnancies.[4,5] The pruritus was due to scabies, dermatophytic infection, urticaria and eczemas besides the pregnancy specific dermatoses which underscores the need for a meticulous search for the underlying disorder.

Of patients complaining of white discharge per vagina, candidiasis accounted for 21.76% of the cases. Monilial vaginitis occurs 10 to 20 times more frequently during pregnancy according to Dotz et al and the view is shared by Winton et al.[1,6] Trichomonal vaginitis accounted for 8.23% of the cases in this study. Dotz et al state that trichomonal vaginitis and vulvitis are more prevalent in pregnant than non pregnant women.[6] Winton et al quote an incidence of 60% pregnant women suffering from trichomoniasis.[1]

Of 18 patients (10.58%) suffering from sexually transmitted diseases, condyloma acuminatum was the commonest sexually transmitted disease in 8 patients (4.70%), while 3 of them (1.76%) were also seropositive for HIV infection. Syphilis was found in 4 (2.34%) cases with 2 cases (1.17%) each of primary and secondary stages respectively. In the study by Raj et al the incidence of syphilis was 0.9%.[7] This high incidence emphasises the need for routine serological screening for syphilis in all pregnant women.

Pigmentary changes occurred in 98.82% of the patients. Similar incidences have been reported by other authors.[1,2,4,6] Melasma was observed in 10.58% similar to the finding of Raj et al.[7] However in Western literature incidence of melasma in white skin is reported between 50 to 70%.[1,4,6]

Striae distensae was seen in 66.47% of patients

which is similar to the observation by Raj et al (75%).[7] Other studies have shown incidences upto 90%.[2,4,6]

Prurigo of pregnancy was the commonest specific disorder of pregnancy accounting for 9.41%. The cases ranged from the 5th month of gestation to those in labour. This finding is consistent with the description of Black et al who state that the onset of this dermatosis is usually around 25 to 30 weeks of gestation.[8] The disease was more severe in multigravidas. Majority of the patients showed lesions distributed on the extensor aspects of the limbs and less marked on the trunk as described by Black et al.[8] Most Western reports quote an incidence of around 2%.[1,6,8-10] While in the series of Raj et al, prurigo was the commonest specific disorder of pregnancy.[7]

The incidence of polymorphic eruption of pregnancy was 2.35%. All the affected patients were primigravidas with gestational ages ranging from 7th to 9th months, fitting well into the observation of other authors.[2,6,8]

The incidence of pruritus gravidarum is reported to be 0.02% to 2.4% worldwide.[6] In the present study an incidence of 3.52% was noted. All patients were in the last trimester. Liver function tests revealed a slight increase in alkaline phosphatase, thus confirming previous reports.[4,6,7]

Scabies was recorded in 17.64% of the cases and was the commonest condition recorded. This could be explained by the fact that majority of the patients in the study belonged to the low socio economic status, and scabies being the commonest diagnosis in the outpatient population in our department, the result of 17.64% also reflects the general incidence in the population.

Marginal gingivitis accounted for 10% of the patients. Wong et al state that pregnancy gingivitis may occur in upto 100% of pregnant women with varying degrees of severity.[4] Upto 80% of pregnant women may develop marginal gingivitis according to Demis.[11]

From our study an unequivocal impression can be drawn, that pregnant women are prone to suffer from a wide range of dermatological problems and sexually transmitted diseases, apart from the specific dermatoses of pregnancy. This study emphasises the need for a scrupulous and meticulous search for dermatological and sexually transmitted diseases instead of a casual cursory examination and dismissing the patients with symptoms attributing them to the normal course of pregnancy.

References

1. Winton GB, Lewis CW. Dermatoses of pregnancy. J Am Acad Dermatol 1982;6:977-998.

2. Aronson IK, Halaska B. Dermatologic disease. In : Barron WD, Lindheimer MD, editors. Medical Disorders During Pregnancy, 2nd ed. St. Louis : Mosby, 1995:534-550.

3. Crawford GM, Leeper RW. Diseases of the skin in pregnancy. Arch Dermatol Syphilol 1950;753-771.

4. Wong RC, Ellis CN. Physiologic skin changes in pregnancy. J Am Acad Dermatol 1984;10:929-940.

5. Roger D, Vaillant L, Fognon A, et al. Specific pruritic diseases of pregnancy. Arch Dermatol 1994;130:734-739.

6. Dotz W, Berman B. Dermatologic problems of pregnancy. In: Cherry SH, Merkatz IR, editors. Complications of Pregnancy : Medical Surgical Gynaecologic Psychosocial and Perinatal, 4th ed. Baltimore : Williams and Wilkins, 1991:562-587.

7. Raj S, Khopkar V, Kapasi A, et al. Skin in pregnancy. Indian J Dermatol Venereol Leprol 1992;58:84-88.

8. Black MM, Stephens CJM. The specific dermatoses of pregnancy: The British perspective. Advances in Dermatology 1991;7:105-126.

9. Hellreich PD. The skin changes of pregnancy. Cutis 1974;13:82-86.

10. Lawley TJ, Yancey KB. Skin changes and diseases in pregnancy. In : Fitzpatrick TB, Eisen AZ, Wolff K, et al. Dermatology in General Medicine, 4th ed. New York : Mc Graw Hill, 1993:2105-2112.

11. Demis DJ. Skin conditions during pregnancy. In: Demis DJ. Clinical Dermatology. Philadelphia: Harper and Row, 1985;12-25:1-9.