



PREGNANCY DERMATOSES - A CLINICAL STUDY

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ABSTRACT**Objective:** The aim of the study is to find out the frequency of dermatoses specific to pregnancy.**Methodology:** Study involved 250 pregnant women with cutaneous complaints attending dermatology OPD and obstetrics OPD of General Hospital attached to Medical College. They were selected irrespective of age, parity, gestational age. All patients diagnosed HIV, STD's and who were on immunosuppressive drugs were excluded. Detailed history including chief complaints related to skin, relation to duration of pregnancy detailed physical and systemic examination.**Results:** Out of 250 pregnant women screened frequency of dermatoses was 40 (16%) more in 3rd trimester, 6.8% had pruritus of pregnancy, 4.8% had prurigo of pregnancy 3.2% had PUPP 1% had P.folliculitis and one case of prurigo annularis.**Conclusion:** Specific dermatoses of pregnancy which are not rare entity, are almost always associated with pruritus and eruption of variable severity, needs timely therapeutic intervention.**KEYWORDS :** Pregnancy, Specific dermatoses, Other dermatoses**Introduction:**

Skin changes in pregnancy require special attention because of profound immunologic, endocrine, metabolic and vascular changes during this period.¹ About 90% of pregnant women may develop both physiologic and pathologic changes in skin, nails and hair. Which should be recognized and managed appropriately.² Until recently, dermatoses specific to pregnancy presents a confusing group of overlapping entities, further pregnancy can alter the course and prognosis of some diseases and tumors. Recent reviews have considered the list of pregnancy specific dermatoses. Historical classification of dermatoses specific to pregnancy include herpes gestationis, PUPP (Polymorphic eruption of pregnancy), prurigo gestationis (Besnier), Intrahepatic cholestasis of pregnancy, toxic rash of pregnancy (Bourne), prurigo of pregnancy (Nurse) include early onset form and late onset form, papular dermatoses of pregnancy (Splanger) and pruritic folliculitis of pregnancy etc.³

Working classification of pregnancy include pemphigoid gestationis, PUPP, prurigo of pregnancy and cholestasis of pregnancy.³ It is considered the above disorders may cause fetal risk like increased risk of fetal pre maturity or small for dates and Neonatal skin involvement, to the chance of recurrence of the particular problem during a subsequent pregnancy and potential effects on the fetal morbidity and mortality.⁴ Accurate diagnosis is important for the choice of treatment and for the prognosis of mother and child, because of dermatoses like pemphigoid gestations constitute risk.⁵

Materials & Methods

This prospective and analytical hospital based study was undertaken among 250 pregnant women with cutaneous complaints attending DVL OPD and antenatal clinic of OBG OPD in Government General Hospital attached to Kurnool Medical College, Kurnool during the period 2015. A total of 250 patients were selected irrespective of age, parity and gestational age after excluding patients diagnosed STD's, HIV, and who were on immune suppressive drugs. The following data was obtained after taking informed consent. A detailed clinical history including chief complaints related to skin and onset in relation to duration of pregnancy. All the patients were subjected to complete general, physical and systemic examination. Associated skin or medical disorders were diagnosed. Liver function tests and skin biopsy was performed whenever required and above information is recorded and it was analysed.

Results:

Total of 250 pregnant women presented with cutaneous complaints to the dermatology and obstetrics OPD Govt. General Hospital, Kurnool for a period of one year were screened to find out the frequency of pregnancy specific dermatoses.

In 250 pregnant women maximum number of patients belong to 21-25 years (52%) followed by 18-20 years (16.8%).

Table – 1 Gravidity and trimester distribution

| Gravidity | | | Trimester | | |
|--------------|-------------|----------------|-----------------|-------------|----------------|
| Gravida | No.of Cases | Percentage (%) | Trimester | No.of Cases | Percentage (%) |
| Primi | 131 | 52.4 | 1 st | 31 | 12.4 |
| Multi | 119 | 47.6 | 2 nd | 7 | 28 |
| - | - | - | 3 rd | 149 | 59.6 |
| Total | 250 | 100 | Total | 250 | 100 |

Table No.1 shows among 250 women 131(52.4%) and 119 (47.6%) were primi gravid and multigravida. Maximum No.of patients were in third trimester 149(59.6%) followed by 70(28%) and 31(12.4%) in second and first trimester.

Table – 2 Specific dermatoses of Pregnancy

| Dermatoses | Frequency | Percentage |
|------------------------------|------------|-------------|
| NIL | 210 | 84.0% |
| Pruritus of Pregnancy | 17 | 6.8% |
| Prurigo of Pregnancy | 12 | 4.8% |
| PUPP | 8 | 3.2% |
| P.folliculitis | 2 | 0.8% |
| Prurigo Annularis | 1 | 0.4% |
| Total | 250 | 100% |

Table 2 shows among 250 pregnant women screened, most common was pruritus pregnancy 17(6.8%) followed by prurigo of pregnancy 12(4.8%), PUPP 8(3.2%), P.folliculitis 2(0.8%) and prurigo annularis 1(0.4%).

Table – 3 Other dermatological disorders

| Disease | No.of cases | Percentage |
|------------------------------------|-------------|------------|
| Acne vulgaris | 22 | 8.8 |
| Pityriasis versicolor | 2 | 0.8 |
| Tinea Corporis | 8 | 3.2 |
| Folliculitis / Furunculosis | 8 | 3.2 |
| Scabies | 6 | 2.4 |

| | | |
|----------------------------|---|-----|
| Herpes labialis | 2 | 0.8 |
| Pityriasis Rosea | 1 | 0.4 |
| Malaria | 4 | 1.6 |
| Papular urticaria | 3 | 1.2 |
| Polymorphic Light Eruption | 3 | 1.2 |
| Contact Dermatitis | 8 | 3.2 |
| Psoriasis | 3 | 1.2 |

Among 250 pregnant women, other dermatological disorders like acnevularis 8.8% was the commonest disorder during pregnancy followed by Tinea corporis and folliculitis 3.2%.

Discussion:

Pregnancy is a period, most changes in the female body are due to hormonal and mechanical alterations. Intense immunological, endo chronological, metabolic and vascular alterations make pregnant women susceptible to physiological and pathological skin changes which can alter the pre existing dermatoses. Skin changes are quite common in pregnancy though most of them are physiological in nature and need no further treatment.

Certain dermatoses are specific to pregnancy or the postpartum period, pregnancy can alter the course of certain infections, immunological diseases and connective tissue disorders. The concerns of the patient having any of the disorder may range from cosmetic appearance, to the change of recurrence of the particular problem during subsequent pregnancy.

In this study specific dermatosis of pregnancy and associated dermatoses of pregnancy were studied in 250 cases of pregnant women.

In present study, mean age of the patients was 26 years which is similar to IFFAT HASSAN et.al., study. Most of the cases belonged to primi gravida (52.4%) in this study are similar to studies of thappa et.al⁸ and Shiva Kumar et.al⁷.

In present study most of the cases belonged to 2nd and 3rd trimester 28% and 59.6% which is similar to earlier studies.

Specific dermatoses of pregnancy are almost always associated with pruitus and an eruption of variable severity.

Table – 4 Specific dermatoses of pregnancy

| Dermatoses | Present Study | Shiva Kumar et.al | Thappa et.al | Iffat Hussan et.al. |
|-----------------------|---------------|-------------------|--------------|---------------------|
| Pruritus of pregnancy | 6.8% | 3.52% | 22.7% | - |
| Prurigo of pregnancy | 4.8% | 9.41% | - | 50% |
| PUPP | 3.2% | 2.35% | 63.6% | 22% |
| P.Folliculitis | 0.8% | - | 4.5% | - |
| P.Annularis | 0.4% | - | - | - |

Holmes and black⁴ proposed a simplified clinical classification of the specific dermatoses of pregnancy into four groups (i) pemphigoid gestationis (ii) Polymorphic Eruption of pregnancy (PEP) (iii) Prurigo of pregnancy and (iv) pruitic folliculitis of pregnancy. The incidence of these specific dermatoses of pregnancy is 0.5% to 3.0%.

In our study of 250 pregnant women , overall 40 cases showed specific dermatoses of pregnancy of these most common was pruritus of pregnancy (6.8%) followed by prurigo of pregnancy (4.8%), PUPP (3.2%) and P.folliculitis. One case of prurigo annularis/auto immune progesterone dermatoses of pregnancy observed at term pregnancy in multi gravida characterized by multiple annular lesions shown in fig.no.1. Prurigo annularis/autoimmune progesterone dermatoses first reported by Davis in 1941.⁸



Fig.no.1 Prurigo Annularis in Multi gravida at term

Most of the cases of pruritus of pregnancy was seen in primi gravida (9.2%) during third trimester (9.7%) the incidence of pruritus gravidarum in reported to be 0.02% to 27% worldwide. Indian studies reported a prevalence of 0.8% to 1.1%. Prurigo of pregnancy reported all incidence of 1 in 300-450 pregnancies. Time of onset is variable characterized by pruritic, excoriated papules and nodules on extensor surfaces of legs and upper arms. In present study 12 cases were seen of which six each in primi and multigravida. 8 cases of PUPP was seen in this study 6 cases inprimi and 2 in multi gravida in 3rd trimester. This is in concordance with the study of shiva kumar et.al. In Ambros – Rudolph and Rashmi Kumari study one case was reported. Vaughan Jones et.al⁹ reported 44 out of 200 cases. In another studies it was 2.35% in 170 patients and 109 out of 401 patients. The exact etiology of PUPP is not known, it was proposed that stretching of the skin damages the connective tissue causing sub sequent conversion of non antigenic molecules to antigenic ones, leading to skin eruption. PUPP occurs mainly in primi in the third trimester PUPP presents as pruritic, polymorphous, erythematous papulovecicles and wheals¹⁰. Recurrent condition tends to be less severe than the first episode¹¹. PFP is rare dermatoses reported by Ambros – Rudolph 0.2% and in 3rd trimester^{12,13} It is characterized by acneform eruptions, popules and pustules on the shoulder, upper back, arms and abdomen pruritus is not a major feature¹⁴. In IFFAT HASSAN'S study it was 22%¹⁵.



Fig.No.2 Prurigo of Pregnancy

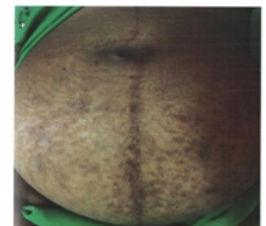


Fig.No.3 PUPP

Among other dermatological conditions acnevularis 5(8.8%) was the commonest, fungal infections like tinea versicolor 0.80% and T.Corporis 3.2%, Herpes labialis was seen in 0.8%, scabies 2.4% bacterial infection folliculitis/furenculosis 3.2% malaria 1.6%, papular urticaria 1.2% PLE 1.2% contact dermatitis 3.2% and psoriasis 1.2%. In Thapper et.al study 12 cases of psoriasis were seen and fungal infections Tinea vesicolor (11) Tinea Corporis (5) were seen. One case of Herpes labialis was seen.

Conclusion:

The study was conducted to findout the frequency of specific dermatosis of pregnancy. The result of this study shows most of the skin changes are physiological in nature and need no further management. However pruritic eruptions of pregnancy, which are not rare entity can be a source of distress to the pregnant and need timely therapeutic interventions.

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