# An Uncommon Case of Pregnancy with Psoriasis

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# Abstract :

Psoriasis is an uncommon skin condition associated with pregnancy. We are presenting a case of 23 years old second gravida woman presented as pregnancy with psoriasis. Psoriatic lesions were exacerbated during pregnancy and she had uneventful vaginal birth.

# Introduction :

Psoriasis is an autoimmune inflammatory skin disease. The prevalence of psoriasis is estimated to be around 1.3–2.2%. Psoriasis can occur at any age, although is uncommon in children (0.71%) and the majority of cases occur before 35 years. <sup>(1)</sup> Incidence is similar for the two sexes. The average age of diagnosis in women is 28, a prime age for pregnancy. It is known as a non specific dermatosis in pregnancy. Prevalence in pregnant women is unknown but probably reflects that of non- pregnant women of child bearing age.

# Case report :

A 23 year old woman presented in antenatal OPD with eight and half months of amenorrhea for routine check up and registration. Her LMP was 30/05/2012 and so her EDD is 7/03/2013. She had  $1^{st}$  full term normal vaginal delivery of a female child 2 and half years ago. She had history of psoriasis since last 3 years and lesions were exacerbated during previous pregnancy. She was taking treatment from private hospital for the same but stopped before few months. On examination her vital signs were normal and there was no edema, pallor or icterus. Her BP was 120/70 mm of Hg. On per abdomen examination symphysis fundal height corresponded to 34weeks of pregnancy with cephalic presentation, LOA position, FHR was 136 beats per minute, regular. She had multiple punched out skin lesions on all over body including both upper limbs and lower limbs especially on extensor surface, on chest, back inner thighs, upper abdomen, face and neck.

Investigations - Her Hb was 11.4 gms, Blood group was O positive, RBS was 91 mg%. She was non reactive for HIV abs and HBs Ag. Her Urine examination was normal. On

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obstetric USG there was a single live foetus with cephalic presentation with 37 weeks maturity with adequate amount of liquor and EFW was 2.5kg. The fetal umbilical artery doppler study was normal.

**Management :** Patient was referred to Dermatologist for diagnosis and management of skin lesions. She was diagnosed as a case of psoriasis vulgaris with pregnancy. She was prescribed clobelostol ointment for local application, twice a day and moisturizers cream three times in a day. There was no change in psoriatic lesion during this pregnancy. She had regular antenatal care, around 4 antenatal visits before delivery. No antenatal complications were noted. She had full term normal vaginal delivery at 38 weeks without any intrapartum or post partum complication.

#### Figure 1: Psoriatic lesions on extensor surface of Hand



#### **Discussion**:

Dermatological disorder of pregnancy can be classified as

- 1. Skin changes during pregnancy.
- 2. Dermatoses of pregnancy.
- 3. Pre-existing skin disease.

**Skin changes during pregnancy :** Oestrogen, progesterone, adrenal steroids, MSH (Melanocyte stimulating Hormone) causes skin changes. Hyper pigmentation is evident early in pregnancy in areas such as areola, perineum and umbilicus. Striae Gravidarum are liner lesions that frequently appear during pregnancy

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commonly found on the abdomen and breast. Nails may become soft and brittle. Hair growth phase increase, hair fall is common 1 to 4 months post partum. Vascular changes- Blood flow increases, small blood vessels are dilated, spider haemangioma, palmer erytheama, pregnancy gingivitis.<sup>(2)</sup>

**Dermatoses of pregnancy :** It is defined as dermatological conditions either identified as unique to pregnancy or are encountered more often during gestation. Pruritus gravidarum – caused by cholestasis. Pruritic Urticarial papules – pruritic cutaneous eruption, appears in late pregnancy.

**Pre existing skin diseases :** Psoriasis is a common, lifelong, genetic, autoimmune skin disease. It is characterized by well circumscribed areas of thick, red, scaly skin. Psoriasis word came from the Greek word "psoros" meaning "rough, scabby". In general, psoriasis does not affect the male or female reproductive systems. However, many psoriasis treatments require special precautions before and during pregnancy.

# Effect of pregnancy on psoriasis

Some women see an improvement in the severity of their psoriasis during pregnancy, while others report their psoriasis gets worse. Changes in severity of psoriasis vary by individual and from pregnancy to pregnancy. Although we do not know exactly why psoriasis may improve during pregnancy, several hypotheses have been put forward. Some researchers believe that the greater amounts of oestrogen and progesterone secreted by the body protect it against psoriasis. These hormones exert a temporary immunosuppressive effect which has beneficial effects on the autoimmune processes occurring in psoriasis.

Effect of psoriasis on pregnancy- pregnant women with severe psoriasis has an increased risk of LBW infants; whereas mild psoriasis was not associated with excess risk of adverse birth outcomes. <sup>(3)</sup> Study by Cohen-Barak et al have shown that Moderate-to-severe psoriasis is associated with spontaneous and induced abortions, pregnancy induced hypertensive diseases, premature rupture of membranes, large-for-gestational age newborns, and macrosomia. <sup>(4)</sup> Psoriasis is not an indication for LSCS. Women with psoriasis can have vaginal delivery. Those women need close foetal monitoring by CTG.

For pregnant women with mild psoriasis, Emolients, petroleum jelly or mineral oil are a good choice for treatment. Topical steroids are safe during pregnancy. <sup>(5)</sup>

Systemic steroid can be use during pregnancy. Studies of pregnant women treated with systemic steroids have not found an increase in birth defects, despite animal studies suggesting that they cause an increased incidence of cleft palate. Pregnant women and those trying to conceive should avoid a topical retinoid (tazarotene), Methotraxate and cyclosporine. <sup>(6)</sup> Women of childbearing potential should use reliable methods of birth control during above treatment. The medication should be stopped immediately if a woman becomes pregnant.

**Methotrexate :** Must be avoided in pregnancy and for at least three months after the last tablet has been taken. It carries serious risk of foetal malformation. Women advise not to breastfeed while taking methotrexate.

**Acitretin :** Must be avoided in pregnancy. It carries serious risk of foetal malformation of brain, ears, face, heart, thymus, central nervous system and limbs. Women advise not to breastfeed while taking acitretin.

**Cyclosporine :** Risk of foetal malformation is similar to that of untreated woman. But may cause high blood pressure and kidney damage, which might harm the baby. If treatment is essential, it must be monitored carefully. It is best not to breast feed during treatment as Cyclosporine passes into the milk.

**Hydroxyurea :** Must be avoided in pregnancy. Serious risk of fetal malformation. Women taking hydroxyurea should not breastfeed.

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