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CASE REPORT**Pustularis Psoriasis In Pregnancy**Dovy Djanas¹, Djusar Sulin²

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Abstract

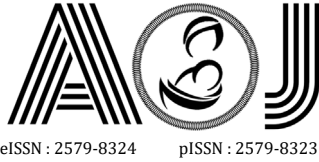
Psoriasis is a residual chronic inflammatory skin disease, characterized by a predominance of pustular eruptions accompanied by systemic symptoms such as fever lasting several days. . Psoriasis in pregnancy can lead to spontaneous abortion, stillbirth and preterm birth. Reported the case of Mrs. YS 38 years old, received from the genital skin section of RS M Djamil Padang with a diagnosis of G3P2A0H2 + pustular psoriasis. Fetomaternal ultrasound was performed, obtained biometrics: BPD: 80mm, FL: 61 mm, HL: 54 mm, AC 271 mm, AFI 10.7 cm, SDAU 2.79, estimated fetal weight 1700-1800 grams. Impression: gravid 31-32 weeks, single live fetus intra uterine. Patients are planned for administration of high doses of corticosteroids. Informed consent to the patient and family about the actions to be performed. Corticosteroid was administered as much as 30 mg long term with a dose of prednisone in tapering off every 2 weeks. The patient was discharged for control to the skin clinic and obstetrics, the patient came 12 days later and was consulted to the obstetrics department for termination of the pregnancy but from the obstetrics department there was no confirmation for termination of the pregnancy. The patient then came 13 days later with 18 hours PRM. Pregnancy termination by cesarean section was performed. a baby girl was born with LBW: 3000 gr, PB: 48 cm, A / S: 8/9, there were no congenital abnormalities such as growth disorders, cleft lip, cataracts, and polycystic kidney disease in infants. The cause of psoriasis in this case is probably pregnancy.

Keywords: *pustularis psoriais, psoriasis, pregnancy, corticosteroid*

INTRODUCTION

There are normal skin changes that are caused by pregnancy, but there are also some pregnancy-specific dermatoses and some are associated with perinatal outcome disorders. All skin diseases affecting women of childbearing age can be found in pregnancy. During pregnancy there are a number of factors that play a role in causing normal changes in the skin. Not yet known with certainty about the incidence of pregnancy that is accompanied by psoriasis pustulosa

Psoriasis is a residual chronic inflammatory skin disease, typically characterized by a predominance of pustular eruption accompanied by systemic symptoms such as fever lasting several days. Sterile pustules which have a size of 2-3 mm, can spread throughout the body and extremities, rarely on the face. The skin around pustulose is usually erythematous. Initial skin disorders in the form of spots with a number of pustules which then merge (confluent) to form a picture like a lake (lake of pus).



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Psoriasis is said to be a multifactorial and multi-system disease, because it involves many systems and organs, all of these factors are interrelated. On normal skin, Basal cells in the stratum basalis divide, move up regularly until they become the stratum corneum for about 28 days, then the keratin layer on the surface of the skin is removed and replaced by new ones. The process only lasted a few days to form a thick, multi-layered and silvery squama. The exact cause of psoriasis is not yet known with certainty, however, many predisposing factors play an important role such as genetic predisposition and immunological disorders. Although the etiopathogenesis of psoriasis is not known with certainty, many factors are suspected as triggers for psoriasis such as: bacterial infections, physical trauma, psychological stress and disorders metabolism. 2,3,4,5,6,7

Pregnancy can affect autoimmune diseases, and vice versa autoimmune diseases can also affect pregnancy. Psoriasis in pregnancy can cause spontaneous abortion, stillbirth, and premature birth. Monitoring the state of the fetus while in the womb is very important, because psoriasis can affect the growth and development of the fetus during the womb.1,5,7

In this case it was reported about a patient with psoriasis pustulosa who always appeared during pregnancy. This is the third pregnancy with a psoriasis that requires treatment on the skin. After the diagnosis can be established, comprehensive management is needed between the Obstetrics and Skin and Gender sections. The purpose of this case discussion is to be able to more comprehensively deal with this patient who has special complications and conditions during pregnancy, so that it is expected to later produce optimal maternal and infant outcomes.

CASE REPORT

In this case a patient was discussed. Y, 38 years old, who was taken from the skin with a diagnosis of pustular psoriasis of pregnancy + candidiasis vulvovagina at 31-32 weeks' pregnancy, who is planned to get corticosteroid therapy. The patient is 8 months pregnant. The first day of menstruation last June 20, 2013 and estimated delivery March 27, 2014. Patients have a history of the same illness since the first pregnancy 5 years ago is also the second child, control to poly skin and genitals and has been treated in the skin for the disease with the results of histopathology examination (2008).

**Figure 1.** Patient of case

No family history of the same illness was found. On examination of dermatological status, location on almost the whole body, generalized distribution, non-distinctive shape, size of placard, erythematous plaques, squama rough white, and the presence of pustules. From the venerealis status duh (+) in the vagina. There is no enlargement of the medial inguinal lymph node in palpation.

The working diagnosis of this patient is psoriasis pustulosa. Further complete blood tests, liver function, and kidney function were also performed, all of which were within normal limits unless hypoalbumin and triglyceride levels were increased. For a while patients get hydrocortisone cream therapy. Because the patient also has a history of toothache, the patient is consulted to the teeth and mouth, and it is recommended to extract radix but because the pregnant patient is not done. Because the disease carries the risk of involving the mucosa and looking for possible focal infections, the patient is consulted to the ENT, and no infection is found in the ENT section.

When the patient was consulted to the Obsgyn section, obtained Gravid G3P2H2 31-32 weeks, not in labor, with good fetal condition, estimated fetal weight 1700-1800 grams. It is recommended if high-dose corticosteroid therapy is indeed needed to inform patients and families about side effects.

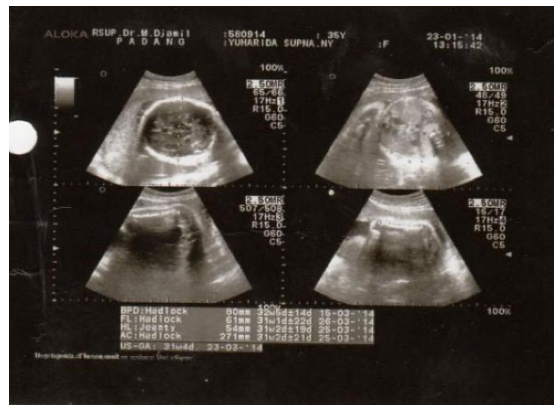


Figure 2. US case

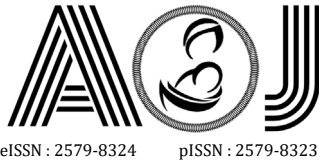
DISCUSSION

When in therapy with systemic hydrocortisone, you should reduce salt consumption, and eat foods that are high in potassium and high in protein. Hydrocortisone is a category C for pregnancy. Side effects associated with the occurrence of cleft lip, cataracts, spontaneous abortion, IUGR and polycystic kidney disease. While the risk for first trimester pregnancy is D category.^{4,5,6,7}

After 6 days of being treated in the room, new patches appeared on the lower limbs while the old lesions dried up and rough scales peeled off. Diagnosis of pregnancy with pustulosic psoriasis is easy to establish if the clinical picture of a psoriatic lesion is clear, even in some cases a definitive diagnosis is made when a waxy spot and Auspitz phenomenon is found. Histopathological features can also help establish the diagnosis of psoriasis. In this patient the clinical symptoms that support pustular psoriasis are clearly visible, found a diffuse lesion in the form of erythematous macules on top of which spread pustules that arise during the first pregnancy (5 years ago) and then recur 4 years ago (during the second pregnancy). The diagnosis is then made by PA examination with the results of pustulosic psoriasis.

The effect of pregnancy on pustulosic psoriasis is a hormonal change in pregnancy that affects the severity of psoriasis. About 75% of women experience significant changes in psoriasis they suffer during pregnancy, with 60% showing improvement and 15% recurrence, 80% of them will experience postpartum flares, usually within 4 months postpartum. Pregnancy can also be a risk factor for psoriatic arthritis. The possibility of general downregulation of the immune system by pregnancy hormones provides an improvement in psoriasis.^{8,9,10}

On the 4th day of treatment, the patient had a fever which then affected the fetus with manifestations of fetal heart rate which increased 174-187 times per minute so that the intra-uterine resuscitation and strict observation were carried out. The effect of pustulosic psoriasis on pregnancy is like other diseases that cause hypothermia, psoriasis which causes high fever



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in pregnant women, ($> 39^{\circ}\text{C}$) can induce abnormalities (cardiac, central nervous system abnormalities), spontaneous abortion, stillbirth, and premature labor. Therefore therapy should include fever-reducing therapy with paracetamol and other physical methods.^{1,11}

Corticosteroids are the therapy of choice for psoriasis. Administration of high-dose steroids such as prednisolone (80 mg per day) will provide a real response. In one case report, psoriasis pustulose in pregnancy was successfully treated with etretinic and cyclosporine.¹² The balance of electrolytes and fluids in the body must be maintained, especially if hypocalcemia is found to be corrected. Sometimes sufferers need an earlier labor because of the severity of the disease.^{13,14}

In these patients with hypoalbumin conditions and from the internal medicine department it is recommended to correct albumin but for some reason the patient cannot receive albumin therapy and is replaced with a high protein diet. In this condition can the constitutional symptoms of nausea, vomiting, diarrhea, chills, fever, hypoalbuminemia and hypocalcemia.

The process of childbirth in this patient is indeed necessary consideration for giving birth to her baby because with the therapy given there is a tendency to improve but a few days later it appears that new psoriasis pustules (flare) and gestational age have reached 33 weeks but have not been in partu so by looking at the development of the disease part the skin makes consideration of the termination of her pregnancy. Hormonal changes that occur in pregnancy affect the severity of psoriasis. About 75% of women experience significant changes in psoriasis they suffer during pregnancy. Pregnancy can also be a risk factor for psoriatic arthritis. The possibility of general downregulation of the immune system by pregnancy hormones provides an improvement in psoriasis.^{8,9,10}

On March 2, 2014 the patient came to the Dr M Djamil Hospital emergency room with complaints of water coming out of water since 18 hours ago without any signs of labor. Pregnancy at that time 36-37 weeks. The termination of labor was performed with caesarean section with the consideration that the gestational age had passed 34 weeks and the membranes had ruptured. In this case the consideration for terminating a pregnancy is appropriate because it is in accordance with the literature that rupture of membranes in the fetus with a gestational age above 34 weeks, there is no place to take expectative action, except to prepare a referral.^{1,5,13,14}

The consideration for choosing termination by caesarean section is based on the patient having ruptured membranes for 18 hours, with greenish color and also consideration of flares in the patient during labor, because labor itself will cause emotional stress and pain. This can be a trigger for flares. Pustular psoriasis in pregnancy usually experiences rapid remission during post partum, but it can also experience flares during labor.^{15,16}

The baby's output in this case can be said to be in good condition, with a APGAR value of 8/9, body weight of 3000 grams with a body length of 48 cm. According to the Lub ChenKho



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curve this is consistent with gestational age and also according to Ballard's neuromuscular maturity index is appropriate for gestational age 38-39 weeks. Side effects of corticosteroids on the fetus such as intra-uterine fetal growth disorders, cushing syndrome and bone growth disorders are not seen in this case. This might be due to the administration of corticosteroids in this case already in the third trimester, where organogenesis is complete. However, further fetal monitoring is needed to exclude the long-term effects of corticosteroid administration.^{17,18,19}

CONCLUSION

Pregnancy causes significant hormonal changes. It is known that hormonal factors are associated with the occurrence of pustulosis psoriasis, so pregnancy can affect pustular psoriasis. Pregnancy can worsen pustulosa psoriasis while pustulosa psoriasis itself can affect pregnancy, besides that pustulosa psoriasis can affect the fetus of a mother suffering from pustulose psoriasis. Comprehensive handling of cases of pustular psoriasis in pregnancy is needed to increase maternal and neonatal outcomes. The choice of termination of labor in this case is appropriate because the fetus is viable and the pregnancy itself will cause worsening of the condition of psoriasis pustulosa in the mother if it continues.

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