Original Research Paper

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AUTOIMMUNE PROGESTERONE DERMATITIS-A PROGESTERONE HYPERSENSITIVITY CONDITION.

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ABSTRACT Autoimmune Progesterone Dermatitis is a rare cyclical dermatological hypersensitivity reaction to the endogenous progesterone surge during the luteal phase of the menstrual cycle. It is predominantly a condition of reproductive age women; however, it has also been reported in adolescents as well as older premenopausal women. **SUMMARY:** 28-year-old P2L2 woman presents with papulovesicular lesions and minimal serous discharge from dorsal and mediolateral aspect of ring and middle finger of right hand since past 3 years. Her symptoms were correlated with her menstrual cycles. After detailed evaluation by the team of gynaecologists and dermatologists, a diagnosis of Autoimmune Progesterone Dermatitis was made based on classical presentation of symptoms and positive result of intradermal aqueous progesterone injections. She was started on oral contraceptive pills and her symptoms got relieved. She responded to the treatment well.

KEYWORDS : Progesterone Dermatitis, pregnancy, menstrual, autoimmune condition.

INTRODUCTION:

The prevalence of autoimmune progesterone dermatitis is unclear, but about 80 cases have been reported in the literature thus far[1]. Autoimmune progesterone dermatitis is a rare dermatological condition cause due to autoimmune response to endogenous serum progesterone levels during the luteal phase of the menstrual cycle.

CASE REPORT:

We report a case of 29-year-old married Asian women P2L2 came to our OPD with complaints of cyclical itching , papulovesicular lesions and minimal serous discharge from dorsal and mediolateral aspect of ring and middle finger of right hand (Figure1) since past 3 years. She classically described the appearance of these lesions exactly 1 week prior to her expected date of menstrual cycle. She used to experience intense itching with increasing amount of discharge from the lesions during menses and it resolved 1-2 days after the cessation of her menses. The onset of above symptoms and signs was noticed by the women since the age of 26 years, for which she visited multiple consultants , but no definitive diagnosis was made, and she was prescribed local steroids and antihistamines for the same. The symptoms used to resolve temporarily.

Patient has history of menarche at the age of 13 years and had a 28-30 days regular menstrual cycle.

The obstetric history of the women consists of two pregnancies, she delivered 1st child at age of 21 years . Her antenatal period and childbirth were uneventful.

At age of 26 years, she started experiencing the above symptoms for 5-6 cycles before her second pregnancy, but she could not corelate them with her menstrual cycles at that time, so she missed giving such history to the treating consultants. She didn't experience itching and eruption of such lesions during her antenatal and postpartum period of her second pregnancy. However, she started having the same symptoms as soon as she resumed her menstrual cycles after pregnancy. She used to take local steroids and antihistamines for the itching, but she did not get complete relief of her symptoms and she discontinued her medications. Eventually she observed that the lesions subsides as soon as her menses gets over without any treatment. At that time, she could corelate the appearance of signs and symptoms with her menses. She reported to our clinic at the age of 28 years with classical history. We evaluated the patient based on detailed history and opinion from Dermatologist was taken. After detailed evaluation , provisional diagnosis of autoimmune progesterone dermatitis was made. To confirm our diagnosis an intradermal progesterone test was performed. An aqueous progesterone suspension was injected intradermally , an erythematous ring shaped lesion of diameter 8-10mm was noted within 8-10 hours. Hence , the diagnosis of autoimmune progesterone dermatitis was made.

We decided to start her on Oral contraceptive pills , and response was satisfactory within two cycles of commencement of treatment. She happily continued the treatment as she also wanted temporary method of contraception.

DISCUSSION:

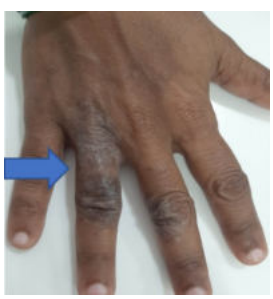
Autoimmune progesterone dermatitis is a unique dermatological condition that occurs during the luteal phase of the menstrual cycle. It is associated with various dermatological eruptions like urticaria, papulopustular lesions, erythema multiforme, stomatitis, Vesiculobullous reactions, folliculitis, eczema and angioedema etc. [2]
As per the literature, the earliest age reported is at menarche[3]. The symptoms usually occur 3-10 days prior to the onset of menstrual cycle and resolve within 2 days into menses. The symptoms usually correlate with the progesterone levels during the luteal phase of the menstrual cycles. It has been found that pregnancy has significant impact on the presentation of the disease. Due to increase in the progesterone levels during pregnancy, there is improvement of the disease process. Our case also presented with relief of symptoms during pregnancy. This correlation has been seen due to increase in levels of serum progesterone and increase production of glucocorticoids during pregnancy. The increasing levels of serum progesterone may acts as desensitizing agent while glucocorticoids have anti-inflammatory actions. Both these mechanism helps in reducing the symptoms of disease during pregnancy.[4]

Management of this disease includes oral contraceptive pills which supresses the ovulation. There has been report of successful treatment with GnRH agonists. Other drugs such as Tamoxifen and Danazol has also been found successful in the treatment of this disease. Patients who have severe symptoms and no relief even after medical management , bilateral oophorectomy is rarely required. [5]

Consent: Ethical principles were maintained throughout the case and consent of the patient was taken in local language.

Source of support: Nil.
Conflict of interest: None.

Figure1: Papulovesicular lesions of Autoimmune progesterone dermatitis.



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