

Case Report

Pruritic Urticarial Papules and Plaques of Pregnancy Managed with Ayurveda: A Case Report

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ABSTRACT

Pruritic urticarial papules and plaque of pregnancy presents with difficulty in its management owing to the limited intervention options available during pregnancy and their sub optimal responses. In pregnancy, also often the mother remains reluctant in getting exposed to biological medicines for her concern to the growing fetus.

In such conditions, Ayurveda, the traditional health care system from India is often looked as a safe alternative to offer symptom resolution and safe continuation of pregnancy without the discomforts of urticaria. This case report is an illustration in this regard.

Keywords Pregnancy induced pruritis, Ayurveda, Urticaria

INTRODUCTION

Pruritic urticarial papule and plaque of pregnancy (PUPPP) is a common pruritic condition seen during pregnancy (Lawley, 1979). It is common in primigravida and usually occurs in the last trimester of pregnancy (Holmes, 1982). It usually occurs in 1 out of 160 pregnancies. The condition may be less common in blacks comparing to white (Roth, 2011; Rudolf, 2006). PUPPP symptoms include pruritic rashes in the form of red papules and plaques appearing on the trunk and proximal region on the extremities. Although the symptoms are often self-limiting, they may lead to extensive itching followed by secondary plaque development and excoriation. Itching may be severe enough to cause disturbance in sleep and skin discomforts. It may also lead to the development of secondary skin infections. The common treatment options for the condition are topical and systemic steroids, emollients and anti-histaminics (Catanzarite, 1990). The condition gets relieved after the delivery but rarely in certain cases the incapacitating nature of symptoms may warrant for an early delivery of the baby (Mayeaux, 2009).

PUPPP usually produces no systemic symptoms and do not cause any adverse peri-natal outcome (Errickson, 1994). Serum chemistry, liver enzymes and blood count usually remain normal in such patients.

We present here an early onset case of PUPPP where symptoms appeared in late second trimester of pregnancy and a mild elevation in liver transaminases was also noticed. The case responded almost instantly to Ayurvedic management and she successfully continued to her third trimester uneventfully.

CASE REPORT

A 28 year old, primigravida in her 21st week of gestation, presented with severe itching (reported as difficult to bear) and red urticarial rashes on lower abdomen, flanks and buttocks. The rashes were in the form of tiny red colored papules diffusely spread to a wide area. The lesions were severely annoying and were able to cause a sleep disturbance.

The previous history revealed that she had per-vaginal bleeding in her 13th week of gestation. Following to this, an intramuscular injection of Hydroxy progesterone Caproate was advised to her once every week. It continued until 21st week and was stopped subsequently on the onset of itching. A detailed hematological and biochemical investigation was carried out (31.12.2015) which revealed marginal increase in liver transaminases. Rest other values were found within normal limits (Table 1).

Patient initially tried western medicine but seeing the non-satisfactory relief from this and reluctance to have any steroid as the treatment, the patient asked for an Ayurvedic intervention.

A detailed clinical enquiry from Ayurvedic perspective by a qualified Ayurvedic physician (RR) trained in use of herbs and minerals in various clinical conditions was subsequently made and the patient was recommended with following Ayurvedic formulations.

- 1.Syp . Hepatoprotective 1 Tea Spoon twice a day orally
- 2.Cap. Guduchi 1 capsule twice a day orally with water
- 3.PowderPravalPishti 250 mg twice a day orally with honey

The actual treatment started approximately one month later to the onset of the symptoms and continued for about 30 days. A complete abolition of symptoms was observed after the treatment marked by absence of itching, improved sleep, disappearance of papules and normalization of liver transaminases levels (Table 2). The treatment was stopped then after. After the withdrawal from the treatment, patient reported for minimal itching some time but it was not bothersome anymore. The disappearance of papules was also

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visible and was comparable through the pre and post treatment photographs of the area involved (Figure 1, Figure 2, and Figure 3).

She had successfully continued the pregnancy and delivered a healthy male baby on 7th May 2016.

Table 1. Investigations and their observed values (31.12.2015)

Name of the investigation	Normal Values	Observed Values
Hemoglobin	12-16 gm/dl	12.3 gm/dl (Gram per deciliter)
Hematocrit	36%-47%	36.5%
Total leucocyte count	4000-10000/ micro litre	9370
Neutrophil		64.2%
Eosinophil		3.8%
Basophil		0.2%
Lymphocytes		24.1%
Monocytes		7.7%
Platelets	150,000- 350,000/ micro litre	230000
C Reactive Protein		3.9 mg/L (per Liter)



Fig.1 Pre and post treatment changes in urticarial lesions

Fig.2 Pre and post treatment changes in urticarial lesions

DISCUSSION

Pruritic rashes appearing in the last trimester of pregnancy are vividly described in Ayurvedic texts. Charak Samhita , the most revered treatise of Ayurveda mentions that these itching symptoms appear usually in 7th month onwards of the pregnancy and contrary to the common belief of its appearance

because of appearance of hair on fetus , it occurs because of increasing size of fetus, causing doshas (physiological regulators of the body) to accumulate in the upper part of the body(Agnivesh, Charaka Samhita, edited by B L Gaur, Rashtriya Ayurveda Vidyapeeth, New Delhi , 2014 Sharira Sthana 8/32). The description about this condition is almost similar in all other classical ayurvedic texts (Vagbhatta, Ashtanga Hridaya, Chaukhambha Publication, Varanasi, 2012 ,Sharirasthana 1/ 58).

Table 2. Liver enzyme status before and during the course of the treatment

Liver Enzyme	Normal Values	31.12.20 15	06.01.20 16	14.01.20 16	01.02.20 16
SGOT	0-35 IU/L	54 IU/L	27IU/L	31IU/L	32IU/L
SGPT	0-35 IU/L	66IU/L	51IU/L	29IU/L	31IU/L

IU stands for International Unit

Ayurveda describes number of emollients and herbal powders to be applied locally in order to reduce the itching in this condition. Plenty of butter is also recommended for oral intake in this condition. This is observable that whole treatment of Ayurveda for this condition mainly focuses upon reduction of pitta(one of the three dosha acting as a catabolic regulator), either through local application of soothing, cooling emollients or as local application of herbal powders which may have pitta reducing properties. Keeping this fundamental in mind, the patient was prescribed with a hepatoprotective syrup having a combination of herbs having pittareducing properties (Table 3), an oral preparation of Guduchi (*Tinospora cardifolia*), and Praval Pishti (powder of pasted coral). The latter two in the prescription are widely known in Ayurveda for their pitta reducing property.

All the medicines prescribed to the patient were primarily individual herb (Guduchi), a herbal formulation (Hepato protective syrup) or a mineral from a biological source (Praval Pishti). These all preparations or their components are in use in Ayurveda for long time and are frequently recommended in various conditions including pregnancy. These are considered probably safe in the literature in conditions of pregnancy and lactation (Pregnancy and Breast feeding, <https://www.ayurtimes.com/liv-52-benefits-uses-dosage-side-effects/#liv-52-side-effects>). We had not come across any safety issue related to the use of these preparations in pregnancy while searching for the same in the published literature.

Table 3. Composition of Hepatoprotective Syrup

Ingredient	Common name	Amount per 5 ml of Syrup
Capparis Spinosa	Himsra	34 mg
Cichorium Intybus	Kasni	34mg
Solanum nigryum	Kakmachi	16mg
Terminalia Arjuna	Arjuna	16mg
Cassia Occidentalis	Kasmarda	8mg
Achilleamillefolim	Biranjisipha	8mg
Tamarix gallica	Jhabuk	8mg

This is observed that in approximate one month of the treatment, the patient responded substantially and was relieved of all the symptoms related with PUPPP. This improvement endorsed the hypothesis of pitta involvement in the causation of these symptoms and prompted for a more systematic enquiry to establish such simple remedies for conditions where a careful choice of the medication is to be made and where Ayurveda can submit a safe and effective contribution.



Fig.3 Pre and post treatment changes in urticarial lesions

CONCLUSION

Pruritic papules and plaques in pregnancy present a nagging situation for patient and the treating physician for difficulty in choosing the safe and effective therapy without any negative impacts upon the health of growing fetus. Conventional modern care which largely composes of steroids is not preferred by many and hence a safe alternative care to treat such situations is highly desirous. What we presented here was a similar case with PUPPP reluctant to have modern care for her problem. She was treated through simple Ayurvedic herbal preparations keeping the Ayurvedic fundamental of diseases and its treatment in mind. The patient responded well to the therapy and experienced minimization of the symptoms along with a safe continuation of pregnancy finally leading to the delivery of a healthy child in the due course.

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AUTHOR CONTRIBUTION

Author SR contributed to the drafting and designing of article. Author RR contributed to the disease identification and case management.

CONFLICT OF INTEREST

No conflict of interest is involved in writing of this article

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ETHICAL APPROVAL

This is a retrospective case report only and hence an ethical approval is not required. Care has been observed to maintain the anonymity of the patient while presenting the photographs. Consent from the patient was taken regarding the publication of data related to her treatment.

REFERENCES

Agnivesh, Charaka Samhita, edited by B L Gaur, Rashtriya Ayurveda Vidyapeeth, New Delhi, 2014 ShariraSthana 8/32

Catanzarite V, Quirk JG Jr. Papular dermatoses of pregnancy. *ClinObstetGynecol.* 1990;33:754-758.

Errickson CV, Matus NR. Skin disorders of pregnancy. *Am Fam Physician.* 1994;49:605-610

Holmes RC, Black MM, Dann J, James DC, Bhogal B. A Comparative study of toxic erythema of pregnancy and herpes gestations. *Br J Dermatol.* 1982;106: 499-510

Lawley TJ, Hertz KC, Wade TR, Ackerman AB, Kartz SI. Pruritic urticarial papules and plaques of pregnancy. *JAMA.* 1979;241:1696-1699.

Mayeaux EJ. Jr. Pruritic Urticarial Papules and Plaques of Pregnancy (PUPPP), in *The Colour Atlas of Family Medicine.*

Richard P. Usatine, Mindy A. Smith, Heidi Chumley, E.J. Mayeaux, Jr., James T ed. (New York, USA: The McGraw-Hill Companies), 2009.

Roth MM. Pregnancy dermatoses: diagnosis, management, and controversies. *Am J ClinDermatol.* 2011;12(1):25-41.

Rudolph CM, Al-Fares S, Vaughan-Jones SA, Mullegger RR, Kerl H, Black MM. Polymorphic eruption of pregnancy: clinicopathology and potential trigger factors in 181 patients. *Br J Dermatol.* 2006;154(1):54-60.

Singh J. Pregnancy and Breast feeding. *AYUR TIMES.* India. 2003. Available at: www.ayurtimes.com/liv-52-benefits-uses-dosage-side-effects/#liv-52-side-effects (accessed on 6th December 2016)

Vagbhatta, AshtangaHridaya, ChaukhambhaPublication, Varanasi, 2012, Sharirasthana 1/ 58