Information Leaflet for Patients

Polymorphic eruption of pregnancy (PEP)

The aim of this leaflet
This leaflet is designed to tell you more about Polymorphic eruption of pregnancy (PEP). It tells you what the condition is, what causes it, and what can be done about it.
Polymorphic eruption of pregnancy (PEP)

What is Polymorphic eruption of pregnancy?
PEP is a relatively common skin disorder that occurs in pregnant women. It usually appears in women during their first pregnancy but rarely repeats in later pregnancies. It is characterised by an itchy rash that commonly begins on the abdomen, particularly within stretch marks (striae). It usually develops during late pregnancy (third trimester) but can also start immediately after the baby is born. It was previously known as PUPPP (“pruritic urticarial papules and plaques of pregnancy”), but this term is no longer used.

What causes Polymorphic eruption of pregnancy?
The cause of PEP is unknown, although there have been many theories about it. Previous studies have suggested a link between increased weight gain during pregnancy, large babies, sex hormones, and the sex of the baby, but none of these have been proven. It more commonly occurs with multiple pregnancies (twins or triplets). There are no specific tests for PEP and it can be confused with other skin conditions presenting in pregnancy.

Does Polymorphic eruption of pregnancy run in families?
No

What are the symptoms of PEP and what does it look like?
Itching is common and often starts on the abdomen, usually sparing the umbilicus (belly button) during late pregnancy (third trimester). If stretch marks (striae) are present, the itching may start within them. Itching may then be followed by a rash with wheals (like hives or nettle rash), small raised lumps in the skin (papules), and large, red, inflamed areas of skin (plaques). It commonly spreads on the trunk, lower abdomen, under the breasts, and limbs. The face, scalp, mouth, and genital area are hardly ever affected. Small blisters are sometimes present, and if these are scratched, then straw-coloured fluid may leak out and cause crusts to form.

How is Polymorphic eruption of pregnancy diagnosed?
Diagnosis is usually based on the typical appearance and distribution of the rash, but may be confirmed by taking a sample of skin (skin biopsy). Usually, the appearance and behaviour of the rash is very typical, but in some cases, the rash can look like other skin diseases such as eczema or a drug eruption. In some cases a special blood test is done as well as a skin biopsy to rule out a more serious skin condition.

Can it be cured?
In most cases, this condition and the symptoms will disappear towards the end of pregnancy or immediately following delivery. It can be suppressed with treatment.

How can Polymorphic eruption of pregnancy be treated?
The primary aim of treatment is to relieve itching and to reduce inflammation and redness in the skin. It is also important during pregnancy to use treatments that are entirely safe for both mother and baby. Emollient (moisturising) creams or ointments can also be applied to reduce itching and soothe sore areas. Bath emollients and soap substitutes are also helpful in many cases. Steroid creams or greasier steroid ointments are often necessary to relieve symptoms. The steroid cream or ointment should only be applied to affected areas of skin and a mild or moderate steroid cream should be
used. For example, hydrocortisone or methylprednisolone acetonate (Advan
tan). The amount should be as small as possible, and ideally only 1-2 small (15-30 gm) tubes should be used for a few days intermittently. However, if the condition is severe, then application of a stronger steroid cream or ointment to the skin in larger quantities may be required.

Treatment with high doses of steroid tablets may be required for severe disease. Alternatively, early delivery can be considered. The dose of steroid tablets can usually be reduced quickly after delivery (within 3-5 days) once the rash starts to disappear.

Antihistamines may be helpful to treat the itch.

The following are considered safe in pregnancy:
- Sedating (cause drowsiness): Clemastine, Dimethindene, Chlorpheniramine
- Non-sedating: Loratadine, Cetirizine.

Are the treatments safe for the baby and mother?
Mild- to moderate-strength steroid creams or ointments appear to be safe during pregnancy. However, stronger steroid creams and ointments may cause problems with the growth of the unborn baby, so that they may be born smaller than predicted if the mother is using large amounts (more than 50 gm, 1/2 large tube per month or over 200-300 gm, 2-3 large tubes, in the whole pregnancy) of steroid creams or ointments. When steroid tablets are taken for longer, there is also an increased risk of the mother developing gestational diabetes (raised sugar levels) and hypertension (raised blood pressure). Careful observation of blood pressure and urine checks are therefore essential at an antenatal clinic, while ultrasound scans can look for changes in the baby’s growth.

Will it come back?
It is unusual for PEP to recur in further pregnancies, unless it is a twin or triplet pregnancy. If it does, it is usually milder.

Will the baby be affected?
No. There have been no reports of the baby being affected.

Is normal delivery possible?
Yes. Caesarean-section (C-section) is not recommended for this condition.

Can women with Polymorphic eruption of pregnancy still breastfeed?
Yes. Breastfeeding does not appear to affect PEP. Even while taking oral steroid tablets, women should still be encouraged to breastfeed as only small amounts of steroid get into breast milk.

Is any special monitoring required?
Yes, regular follow-up at an antenatal clinic is important to monitor foetal size. Blood tests, urine tests, and blood pressure checks with ultrasound scans are all important to monitor the mother and baby’s health.