Pregnancy related dermatoses

Reported by SY Wong 黃曉毅

Date:	1 November 2007
Venue:	Langham Hotel, Hong Kong
Speaker:	Dr. Shirley Chan Specialist in Dermatology in Private Practice
Organisers:	Hong Kong Society of Dermatology and Venereology; The Obstetrical and Gynaecological Society of Hong Kong

True dermatoses of pregnancy include polymorphic eruption of pregnancy (PEP), also known as pruritic urticarial papules and plaques of pregnancy (PUPPP), pemphigoid gestationis, prurigo of pregnancy, pruritic folliculitis of pregnancy, cholestasis of pregnancy and impetigo herpetiformis.

PEP/PUPPP, also known as toxic erythema of pregnancy & toxaemic rash of pregnancy, is the commonest pregnancy related dermatoses with an incidence of around 1 in 160 to 1 in 300 pregnancies. Pruritic, polymorphic erythematous eruption occurs in second half of pregnancy or immediately postpartum, and is more common with first pregnancies and multiple gestations. It may be related to damage to connective tissue or elastic fibres within striae distensae, hormonal factors or fetal factors. The condition is self-limiting and tends not to recur in subsequent pregnancies. Majority settles with emollient and topical steroids with a few needing systemic steroids. Outcome for mother and baby is good.

Pemphigoid gestationis, sometimes referred to as herpes gestationis, is a rare autoimmune skin disorder with an incidence of 1 in 50,000 mid- to late-term pregnancies. It is associated with hydratiform moles, choriocarcinomas, Graves' disease, and the presence of HLA-DR3 and HLA-DR4 inheritance. BP180 is identified as the target antigen which is present on the placenta after second trimester. The disease takes variable courses and flare-ups are common in subsequent pregnancies or with use of oral contraceptive pills. The condition starts in the umbilical region in 50% of the cases while sparing the mucosa. It presents with pruritis and urticated lesions initially. Systemic steroid is the mainstay of treatment in more severe cases and there is an increased risk of premature delivery and small for gestational age in the fetus, but no increase in fetal mortality. Transient blister or rusticated lesions are noted in up to 10% of babies due to trans-placental transmission of maternal antibodies. Direct immuno-fluorescence has the highest diagnostic test sensitivity so far. A new anti-tetrameric NC16A ELISA has a sensitivity and specificity of 89.9% and 97.8% respectively, with levels of circulating auto-antibodies against BP180 paralleling disease activity, rendering it a potential useful tool in the future for the diagnosis and monitoring of pemphigoid gestationis.

Prurigo of pregnancy occurs in approximately 1 in 300 pregnancies and has been reported in all trimesters. It does not recur in subsequent pregnancies. The cause of this condition is unclear with no specific laboratory or

histopathological features. There are no adverse effects for the fetus or the mother. Topical steroids and oral antihistamines may provide symptomatic relief.

Pruritic folliculitis of pregnancy presents in the second and third trimesters as erythematous follicular papules and sterile pustules. The aetiology is unclear with no reports of adverse fetal outcomes. Treatment includes mild topical steroids and benzyl peroxide.

Impetigo herpetiformis is a rare specific dermatosis of pregnancy. The onset is in the third trimester. It resolves soon after delivery and tends to recur in subsequent pregnancies or even with menstruation or oral contraceptive pills. The condition starts in the flexural regions and spread centrifugally, forming polycyclic plaques with pustules in the periphery. The histology is similar to generalised pustular psoriasis. It is associated with electrolyte disturbances, sepsis, placental insufficiency, stillbirth and neonatal death. The management is supportive and systemic corticosteroid and cyclosporine may be needed.

Cholestasis of pregnancy has an incidence of 0.02%-0.04% and occurs more in twin pregnancies. Seventy percent recurs in next pregnancy. Excoriations due to itching are often seen. Increased total bile acids, alkaline phosphatase, bilirubin, cholesterol, lipids are found. It is associated with increased incidences of stillbirth and premature birth, postpartum haemorrhage and fetal intracranial haemorrhage due to vitamin K malabsorption. Treatment options include cholestyramine, ursodeoxycholic acid, phenbarbitone, and phototherapy. Antihistamine is not useful.

Learning points:

It is important to recognize the diagnosis and initiate appropriate treatment for pregnancy-related skin conditions as there may be potential fetal and maternal risks. A team approach involving dermatologists, paediatricians and obstetricians is helpful.