Rheumatoid Purpura During Pregnancy: About a Case and a Review of the Literature

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Abstract: The Rheumatoid purpura or Henoch-Schönlein purpura (HSP) is a systemic vasculitis of unknown etiology affecting the small vessels. It is characterized by the association of cutaneous, articular and gastrointestinal signs, which may occur in successive outbreaks. Kidney disease is sometimes associated with these signs. It happens rarely among adults and its discovery during pregnancy is an exceptional circumstance. The purpose of this study is to report our first case of HSP and Pregnancy association, its maternal-fetal prognosis, with particular emphasis on its favorable evolution contrasting with that of some cases reported in the literature.

Keywords: Rheumatoid purpura, pregnancy, Leukocytoclastic vasculitis.

INTRODUCTION

The Rheumatoid purpura or Henoch-Schönlein purpura (HSP) is a systemic vasculitis of unknown etiology affecting the small vessels.

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Kidney disease is sometimes associated with these signs. It happens rarely among adults and its discovery during pregnancy is an exceptional circumstance.

CASE REPORT

Ms. O.F 27 years old, having as antecedent a repeated tonsillitis which presents at 17 weeks of amenorrhea, bilateral and symmetric inflammatory arthralgia of elbows, knees, ankles and small joints of the hands with significant functional impotency and asthenia without digestive disorders. Four days later, a purpura of the lower limbs, favored by the orthostatism, appears.

On physical examination, the patient is a febrile, the articulations are hot, painful, with no associated effusion and a limited articular amplitude, the vascular petechial purpura is infiltrated (Fig1). The abdomen is soft, painless. The urine is clear and the neurological exam is normal.

In biological exam, there is a moderate inflammatory syndrome (C-reactive protein = 30 mg / L, sedimentation rate = 38mm at the 1st hour), the renal function is normal (urea = 0.16 g / l; creatinine = 4 mg / l; Addis count : absence of crystals and cylinders, proteinuria is negative, also hematuria ). The autoimmune test (Anti-cyttoplasmic antibodies of polynuclear, antinuclear antibodies, anti CCP antibody, anti DNA antibodies, anticardiolipin, antiphospholipid antibodies ...) and the infectious test (ASLO, venereal disease research laboratory (VDRL), Treponema pallidum hemagglutination assay (TPHA), serology for hepatitis B and C, cytobacteriological urine exam ...) are negative.

In histology, Skin biopsy showed morphological and immunological aspects of leukocytoclastic vasculitis with vascular IgA deposits in favor of a rheumatoid purpura without renal or gastrointestinal involvement.
A treatment based on analgesic such as paracetamol associated with rest is administered and allowed a complete improvement (Fig 2).

**Fig-2: Regression of purpura after a few days of rest**

On fetal plan, the obstetrical monitoring (fetal ultrasound scan, Doppler umbilical and uterine arteries) is normal (Fig 3). A clinic-biological and maternal-fetal monitoring has been established in collaboration with obstetricians. The patient has vaginally delivered in a normal way a girl alive of 3400g at 41 weeks. At 2 months of postpartum, the patient did not present recurrence.

**Fig-3: Doppler during an obstetric ultrasound scan at 18 weeks**

**DISCUSSION**

The HSP is part of a broad nosological set, the so-called vascular purpura that is to say having no hemostasis disorders and whose histopathological substratum is a necrotizing vasculitis of small vessels of the dermis [1]. It stands as an isolated skin affection (acute or chronic), or as a manifestation of systemic disease.

Various factors have been implicated in its origin, mainly bacterial or viral infections [1]. In fact, an infection existed in approximately 75% of all cases, 1-3 weeks before the onset of purpura (streptococcal, staphylococcal infection, viral hepatitis, etc.) [1-4]. In our patient, no triggering factor could be identified. The HSP is mainly observed between 2 and 7 years old, the frequency being 18/100000 between 0 and 14 years [1, 3, 5] with a male predominance. In adults, it is observed less frequently and gender sex ratio 2.5 / 1 [1, 5, 6]. Few cases have been published in pregnant women [1]. The low incidence of this disease in adults may explain in part the rarity of the HSP association and pregnancy.

**Fig-2**

We have collected in the literature only 21 cases of HSP associated with pregnancy. Among these, there are eight cases of HSP revealed during pregnancy [7].

The usual circumstances of discovery of the disease are either a petechial or ecchymotic purpura of the lower limbs sometimes extending to the buttocks and trunk or upper limbs and face [1], and leading to skin biopsy, this is the case of our patient; either renal manifestations like hematuria or edema leading to the needle renal biopsy renal. These discovery circumstances are the same in the gravido-puerperal period without any of them appear more frequent. It is the histological study on skin biopsy or renal biopsy will confirm the diagnosis.

The HSP of the adult is different from that of the child by its evolutionary aspects and its prognosis that is excellent when the kidney is spared [1-3, 8, 9]. The obstetric complications reported in the literature are pregnancy induced hypertension and its consequences including preeclampsia and eclampsia [10]. According to Ferris [9], women who do not have kidney disease have a good prognosis.

**CONCLUSION**

The HSP during pregnancy is a rare situation, but whose maternal fetal prognosis is good [9]. This does not exempt to establish a joint and close monitoring between rheumatologists and obstetricians.

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