



Atteintes rénales durant la grossesse de la patiente lupique: quel suivi, quelle prise en charge?

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« Systemic lupus erythematosus is mainly a disease of fertile women and the coexistence of pregnancy is by no means a rare event. »

G. Carvalheiras, 2010

Patiente de 25 ans

- Deux grossesses sans particularité (39 sem)
- Une fausse couche
- Pas d'autres ATCD

- Nouvelle grossesse, 20^{ème} semaine
- Artralgies, arthrites très douloureuses
- Diagnostic de LED pendant la grossesse

Patiente de 25 ans

- Oedèmes et polysérosite
- Protéinurie de 8g/24h, microhématurie glomérulaire
- Hypertension artérielle 150/90mmHg
- Anémie

Valeurs de laboratoire

ANA:	1:640	
Anti-DNA:	>200 IU/ml	
C3:	0,41 g/l	(norme: 0,9-1,8 g/l)
C4:	<0,06 g/l	(norme: 0,1-0,4 g/l)
Hémoglobine:	69 g/l	(norme: 120-160 g/l)

Activité rénale de LED ?

hématurie ?

protéinurie ?

hypertonie ?

consommation complément ?

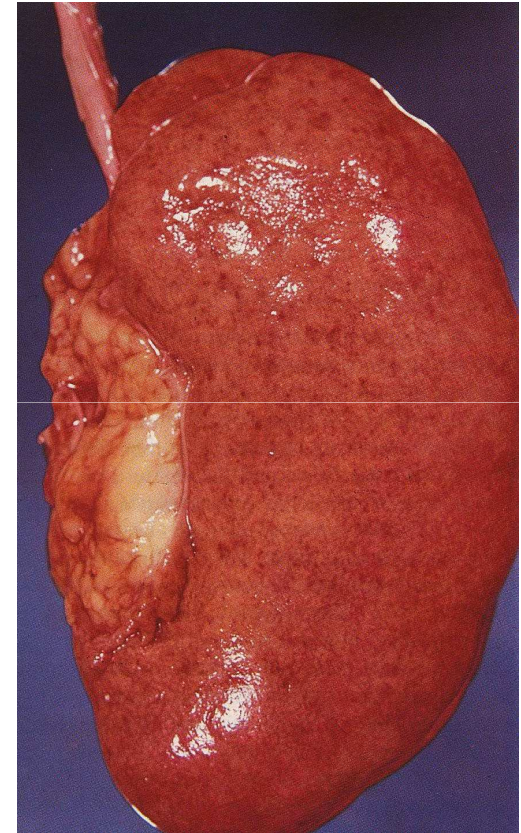
titres anticorps ?

Néphrite lupique

Ponction biopsie rénale

Si possible pas de PBR
pendant la grossesse.

L'histologie ne change pas le
traitement ni l'attitude, ni
dans la maladie lupique, ni
dans les GN.



Classification de l'OMS des GN lupiques

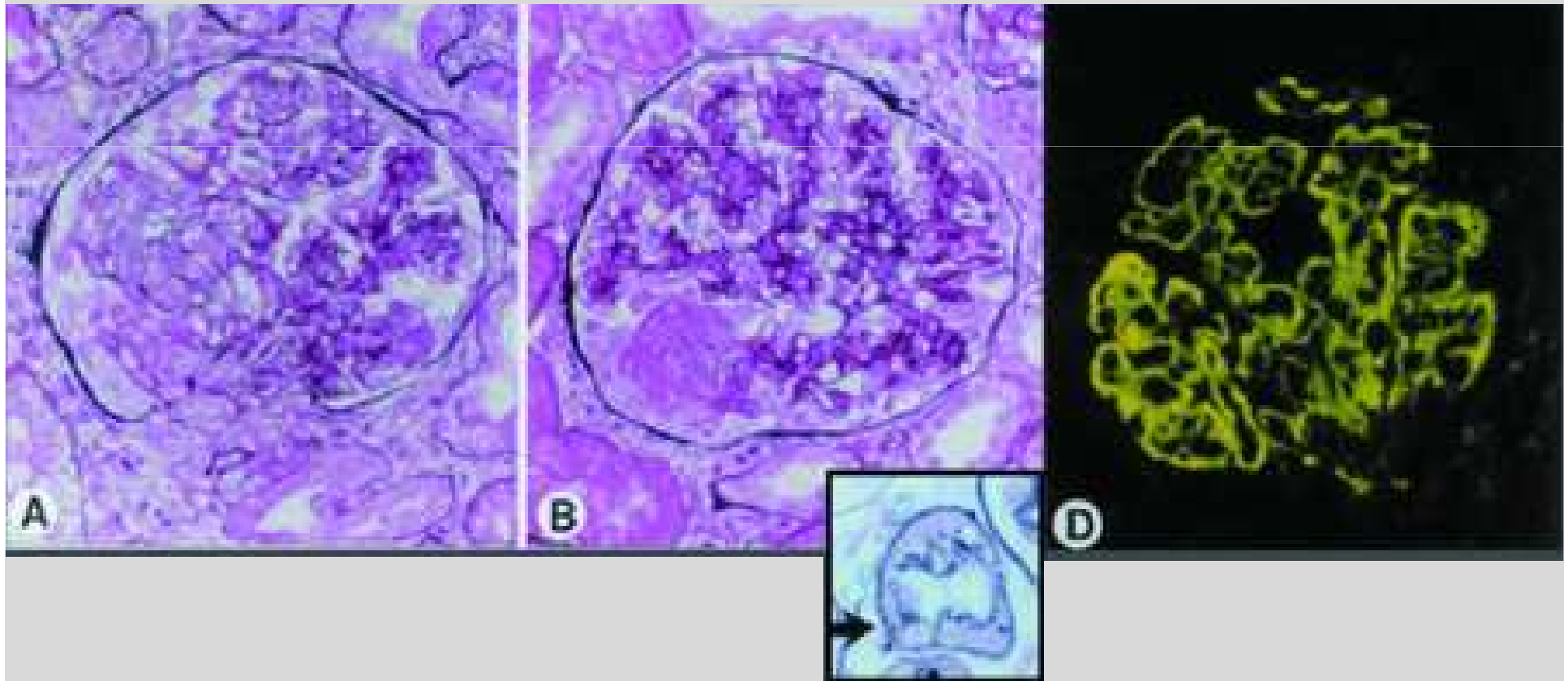
Classe I	Rein normale
Classe II	GN mésangiale
Classe III	GN proliférative segmentaire et focale
Classe IV	GN proliférative diffuse
Classe V	GN extramembraneuse
Classe VI	GN sclérosante

Classification de l'OMS des GN lupiques

Classe I	Rein normale	Symptomes: pas de symptomes
Classe II	GN mésangiale	svt absents
Classe III	GN proliférative segmentaire et focale	svt absents
Classe IV	GN proliférative diffuse	insuffisance rénale, HTA
Classe V	GN extramembraneuse	syndrome néphrotique
Classe VI	GN sclérosante	insuffisance rénale (cicatrices)

Cave: WHO IV: diffuse proliferative LN

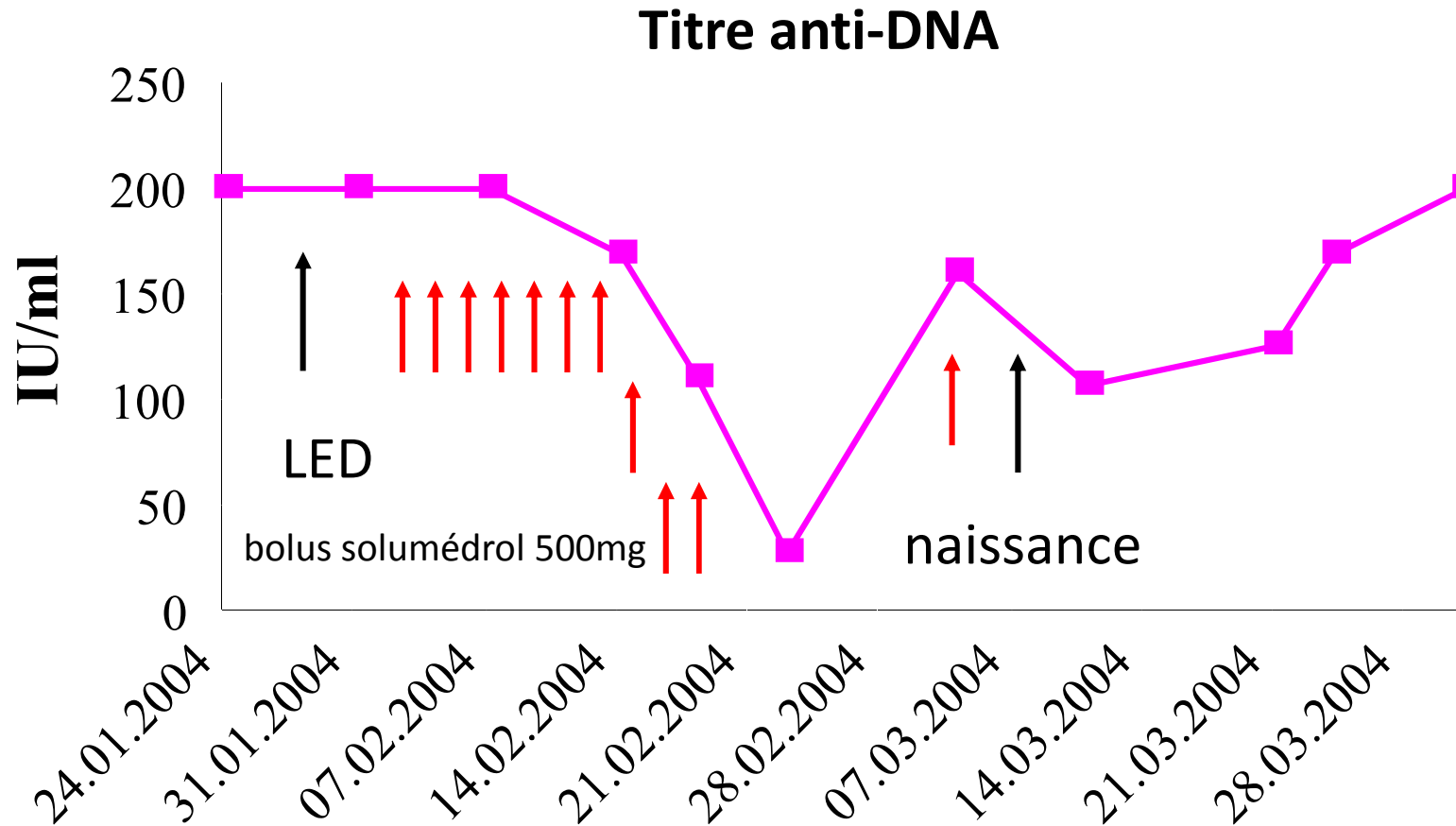
Mais: Pas de donnée pendant la grossesse!



Glomérulonéphrite lupique et ponction biopsie rénale

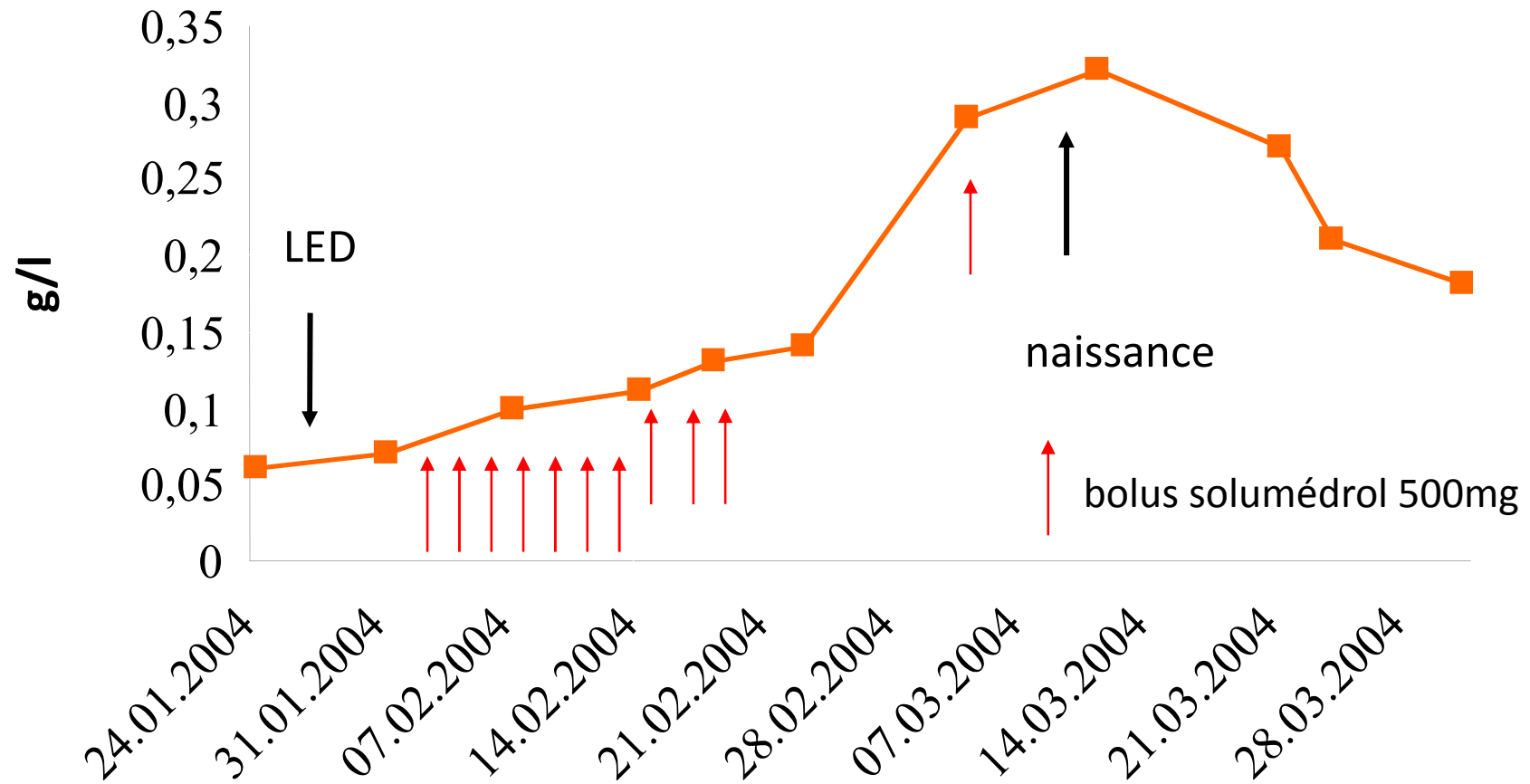
1. Une biopsie „calme“ avant la grossesse est un bon facteur pronostique
1. Différentes classes peuvent coexister, aussi pendant la grossesse
1. La classe IV a le plus mauvais pronostic, mais ne changera pas l'attitude thérapeutique pendant la grossesse
1. Durant l'évolution de la maladie lupique l'atteinte rénale peut changer de classe
1. Souvent une première ou nouvelle biopsie rénale est nécessaire après l'accouchement pour guider le traitement

Patiente de 25 ans



Patiente de 25 ans

C4 complément



Patiente de 25 ans

Naissance d'un fils de 900g, en bonne santé



« Views on the advisability of pregnancy in patients with lupus glomerulonephritis are surprisingly variable. »

P. S. Kincaid-Smith, 1993

Historically, pregnancy should be avoided in patients with SLD

Bear RA, 1976 and 1978:

50% mortality of the mother in 2y follow-up.

BUT: 6 patients with nephrotic syndrome

In contrast:

Mintz and Rodriques-Alvarez 1989:

58 pregnancies in women with lupus nephritis with good short term prognosis and no deleterious influence of pregnancy on the evolution of SLE in these patients.

Outcome of pregnancy in the study from Mintz and Rodriguez-Alvarez, 1989

102 pregnancies with SLE	Abortions	Prematurity	Intra-uterine malnutrition	Perinatal mortality
44 SLE Without nephropathy	5 (11%) 3 active SLE	20 (45%)	9 (20%)	2 (4.5%)
58 SLE With nephropathy	12 (21%)	25 (43%)	11 (19%)	3 (5%)

**Outcome of pregnancy in patients with glomerulonephritis other than SLE_GN
(Packham et al. 1989)**

365 pregnancies with glomerulonephritis

Fetal loss 26% (5% therapeutic abortions)

Prematurity 24% (15% small for gestational age)

Perinatal mortality 14%

No difference between different forms of idiopathic glomerulonephritis
(without vasculitis).

Outcome of pregnancy in patients with glomerulonephritis other than SLE_GN (Packham et al. 1989)

Three major risk factors for progression of GN:

- proteinuria
- hypertension
- renal function

Proteinuria occurred in 60% of pregnancies, failed to resolve in 15%.

Hypertension present in 40% of pregnancies, and early onset.
18% de novo hypertension with persistence 6 months after delivery.

Renal function deterioration in 15%, and 5% did not resolve after pregnancy.

Cut-off value about 160 microM/l creatinine.

Pregnancy and Lupus: When is the best time to get pregnant ?

« The answer is simple: when you are at your healthiest. »

Lupus.com

Cumulative data of several large studies devoted to SLE patients with renal involvement conclude that pregnancy is most often successful and uneventful when **SLE has been in stable remission for at least one year and renal function is normal at conception.**

In this context the overall success rate, excluding first trimester abortion, is between 80-90%, with a higher incidence of preterm delivery.

P. Jungers and D. Chauveau, Kidney Int 1997

**LUPUS
STREET SW1**

CITY OF WESTMINSTER

Fetal outcome (n=65) of pregnancy in women with systemic lupus Erythematosus. (Packham et al. 1992)

	Number	Percent %
Spontaneous abortion	5	8
Therapeutic abortions	5	8
Stillbirths	7	11
Neonatal deaths	5	8
Total fetal loss	22	34
Severe prematurity	5	8
Prematurity	14	22
Term	24	37

Fetal outcome (n=65). (from Packham et al. 1992)

	Pregnancy prior to biopsy diagnosis		Pregnancy after biopsy diagnosis	
	N=18; number	%	N=47; number	%
Fetal loss	8	44	14	30
Perinatal mortality	6	33	6	13
Prematurity	6	33	13	42
Live infant at term	4	22	20	42

It seems important to know the patient and the activity of the disease before pregnancy.

Comparison of fetal outcome of lupus anticoagulant (LAC) positive and negative mothers. (from Packham et al. 1992)

*p<0.01; **p<0.001

Fetal outcome	LAC pos. N=21		LAC neg. N=44	
	number	%	number	%
Therapeutic abortion	1	5	4	9
Spontaneous abortion	2	10	3	7
Stillbirth	7	33	0	
Neonatal death	2	10	3	7
Total fetal loss	12*	58	10*	23
Severe premature	0		5	11
Premature	4	19	10	23
Full term	5	24	13	43
Total live births	9**	43	34**	77

Maternal outcome in lupus nephritis. (from Packham et al. 1992)

	number	%
Total pregnancies	64	
Impaired renal function		
- Irreversible	1	
- Reversible	11	
Total	12	19
Hypertension		
- Irreversible	9	14
- Reversible	19	
- Exacerbation	4	6
Total	28	44
Early	18	28
Severe	8	13

Maternal outcome in lupus nephritis. (from Packham et al. 1992)

	number	%
Total pregnancies	64	
Increased proteinuria		
- Irreversible	3	5
- Reversible	28	44
Total	31	48
Nephrotic	11	17

Comparison of maternal outcome of lupus anticoagulant (LAC) positive and negative mothers. (from Packham et al. 1992)

Maternal outcome	LAC pos. N=21		LAC neg. N=43	
	number	%	number	%
Impaired renal function				
- Irreversible	0	-	1	2
- Reversible	7	33	4	9
Total	7	33	5	12
Hypertension				
- Irreversible	2	10	7	16
- Reversible	4	19	11	26
- Exacerbation	3	14	1	2
Total	9	43	5	12

Comparison of maternal outcome of lupus anticoagulant (LAC) positive and negative mothers. (from Packham et al. 1992)

Maternal outcome	LAC pos. N=21		LAC neg. N=43	
	number	%	number	%
Increased proteinuria				
- Irreversible	0	-	3	7
- Reversible	9	43	19	44
Total	9	43	22	51

The maternal outcome was excellent in this series, with neither end stage renal failure nor death occurring in any patients.

Mothers with LAC positive show more renal failure and more hypertension compared to LAC negative mothers.

**Treatment of lupus glomerulonephritis during pregnancy.
(from Packham et al. 1992)**

	Number	Percent (%)
Prednisolone	43	67
Heparin	16	25
Aspirin	12	19
Dipyrimadole	10	16
Azathioprine	8	13
Plasma exchange	5	8
Gammaglobulin in patients LAC pos	4	6
Eicosapentaenoic acid (Ω 3)	3	5

Controversy about low-dose prednisone for every pregnancy in LED patients.

Lupus glomerulonephritis during pregnancy

Pregnancy is possible with good out-come in stable patients with lupus eythematosus.

Three major risk factors for progression of renal disease:

- proteinuria
- hypertension
- renal function

The main question is time of delivery.

Do not loose time in catastrophic situations, such as HELLP syndrome, they are real medical emergencies.

Paul Klee
Die Grenzen des
Verstandes („Les
limites de la raison“),
1927
Berlin, collection privée

