Case 1: Pre-pregnancy counselling for women with lupus nephritis
Liz Lightstone

An African Caribbean woman was diagnosed with systemic lupus erythematosus (SLE) in 2009 aged 21 years. At that time, she had severe Class IV lupus nephritis (LN) with crescents and acute kidney injury and was treated with steroids and cyclophosphamide. She achieved good clinical remission and was maintained for several years on low-dose prednisolone, mycophenolate mofetil (MMF), hydroxychloroquine (HCQ) and irbesartan. Antiphospholipid and lupus anticoagulant were negative, she was anti Ro positive with no extra renal manifestations.

She attended for pre-pregnancy counselling in July 2017 aged 29 years. She was off steroids but still taking MMF and irbesartan. Her creatinine was 97 umol/l with eGFR 70.8 ml/min (59 ml/min not corrected for race) and she had no proteinuria. Her labs at that time were ANA 1:320; dsDNA titer 10 units/ml; C3 normal; and C4 low 0.13 g/l. The counselling addressed fertility (in light of previous cyclophosphamide), contraception, as well as medicines management; in particular, what to stop (i.e. MMF and irbesartan), what to continue (i.e. HCQ) and what treatments might be added (i.e. azathioprine, aspirin, folic acid). The evidence base for advice regarding timing, risks to her and to the baby came from the PROMISSE study, metaanalyses and the Italian series (Moroni G et al). Her key risk factors for adverse pregnancy outcomes were being non-white, on an antihypertensive, and having anti Ro antibodies but she was in a good remission from her lupus. I advised her to continue to use contraception whilst weaning off her MMF and to consider trying to conceive, if all remained well, when off her MMF for at least 3 months.

She presented pregnant in December 2017 but had not stopped either her MMF or irbesartan, despite the advice to do so back in July that year. We discussed the risks to the baby of first trimester exposure and she declined termination. Coincident with the pregnancy, she was serologically more active, and became symptomatic with joint pains, rising creatinine and hypertension and developed significant proteinuria. During the workshop we will discuss the pros and cons of renal biopsy in pregnancy and how we managed a really major flare. Also, the difficulty of diagnosing pre-eclampsia in a patient with active LN. The pregnancy was ultimately successful. She was treated with rituximab and MMF post-partum and again advised regarding contraception. The story continues in 2020!

Case 2: Lupus nephritis in pregnancy
Angela Tincani

Maria is a 39-year-old woman who consulted at 21 weeks of gestation for the sudden occurrence of proteinuria (3.8 g) during a previously uncomplicated pregnancy with normal fetal growth.

She had a history of undifferentiated connective tissue disease, diagnosed in 1997, because of thrombocytopenia (48,000 platelets per microliter) and Raynaud’s; positive ANA, anti U1RNP. She was successfully treated with corticosteroids, which were stopped in 2000. She has had Hashimoto thyroiditis, treated with levothyroxine since 2000.

In 2014 she had vaginal delivery of a female baby at 40 weeks of an uncomplicated pregnancy without any treatment. In 2016 and 2017 she had three early miscarriages at 8, 7 and 9 weeks.

During our first evaluation (29th March 2019), she presented acrocyanosis and modest feet oedema. Proteinuria was 4 g with normal renal function; positive ANA and anti Sm/RNP; low titer anti ds DNA; positive anti-cardiolipin and anti β2 glycoprotein1 IgG.

In the last week she was treated with prednisone 50 mg/day plus low dose aspirin (LDA) and low molecular weight heparin (LMWH).

Azathioprine (AZA) was added, but because of increasing proteinuria (9.8 g) one week later she was admitted to the Obstetric Department. She was given three small pulses of
methylprednisolone (250 mg), AZA shifted to tacrolimus (3 mg/bd) and HCQ started. When discharged, prednisone was reduced to 25 mg/day; LMWH, LDA, HCQ, vitamin D and levotiroxine unchanged. Proteinuria rapidly decreased (1.3 g on 15th May and 0.260 g on 10th July).

On 23rd July she had vaginal delivery at 38 weeks' gestation, her baby was 3.390 kg and 51 cm high; APGAR 10/10. Tacrolimus was suspended on the delivery day and the patient continued with prednisone 5 mg every other day with LMWH during puerperium. A subsequent kidney biopsy confirmed Class V glomerulonephritis.

At last evaluation (October 2019), the patient and the baby were fine, urinalysis did not show proteinuria.

Discussion Points
- Pre-pregnancy counselling for women with a history of LN
- Management of acute flares of LN in pregnancy
- Diagnosing pre-eclampsia in women with active LN
- Discuss the use of immunosuppressive medications in pregnancy

Learning Objectives
- Explain the importance of pre-pregnancy counselling in women with LN
- Discuss the best management of flares of LN in pregnant women
- Discuss how to recognise pre-eclampsia in women with LN
- Distinguish lupus nephritis from APS nephropathy