

Treatment of membranous glomerulonephritis

What is it?

Membranous glomerulonephritis (MGN), also known as membranous nephropathy, is a slowly progressive disease of the kidney. For most patients with MGN, the cause of the disease is idiopathic (unknown). The inflammation in the kidney causes protein to leak into the urine (proteinuria). This leak may be large enough to reduce the protein level in the blood, leading to swelling and high blood pressure.

How will MGN affect me?

About a third of patients with MGN recover spontaneously, another third progress to kidney failure and dialysis and the last third continue to have proteinuria, without progression to kidney failure. If you are being considered for this treatment, it means that we think your chance of progression to kidney failure needing dialysis is high.

Will the treatment work?

This treatment has been shown to reduce the chance of needing dialysis in the next 10 years from 35% to 11%. It has also been shown to double the chance of stopping the protein leak.

What is the treatment?

The six month treatment involves alternate months of steroids (into a vein initially and then by mouth) and cyclophosphamide tablets (a powerful immunosuppressant).

You will also receive tablets to protect you from some of the possible drug side effects. You will collect your treatment once a month from the CAPD Unit on Albert Ward and be seen monthly in the outpatients clinic, with regular blood tests.

Prescription charges

If you have to pay for NHS prescriptions it may be cheaper to buy a prepayment certificate (PPC) – effectively a prescription season ticket. A 3 month PPC costs £29.10 or £104 for 12 months and could save you money if you need more than 3 prescribed items in 3 months. You will be requiring 5 additional medicines on a monthly basis for the duration of this 6 month treatment so it's a good way of reducing your costs currently (Feb 2017) £8.40 per item = £42.00 per month for this treatment alone. For more information visit www.nhs.uk/NHSEngland/healthcosts

Possible drug side effects:

Prednisolone:

- Infection: Steroids make you more prone to 'opportunistic infection' (so-called, because they only affect vulnerable people). You will be given treatment (Septrin and Nystatin), to protect against thrush and pneumonia. If you have had previous TB exposure, you will be given Isoniazid and Pyridoxine. If you develop a fever, cough or sore throat, contact us immediately.
- Osteoporosis: There is a risk that higher doses of steroids may weaken bones; you will be given Alendronate to prevent this.
- Stomach irritation: You will be given Omeprazole (an acid blocker) to prevent irritation to the lining of your stomach.
- Appetite: Steroids nearly always increase appetite. To avoid gaining weight, you may need to be careful about the amount you eat.
- Diabetes: High doses may affect your body's ability to handle sugar. Up to 20% of patients may develop temporary diabetes, some requiring treatment.
- Skin and muscles: Steroids may make the skin thinner and more likely to bruise and the larger muscles weaker.
- Blood pressure: A degree of fluid retention may cause the blood pressure to rise.
- Mood: Some patients find steroids cause mood disturbance - mood change, psychosis, difficulty sleeping.

Cyclophosphamide:

- Low white cell count with risk of severe infection.
- Thrombocytopenia (reduced number of platelets, risk of bleeding/bruising).
- Inflammation and bleeding from the bladder.
- Hair may become thinner (alopecia).
- Nausea and occasional vomiting.
- If the total dose is greater than 80mg/kg, there is an increased risk of some cancers (such as bladder and bone marrow).
- Pulmonary fibrosis (lung damage).
- If the total dose is greater than 50 mg/kg, there is a risk of reduced fertility and sustained amenorrhoea (no periods) in women over 31years, but this treatment involves much lower doses.

What will happen next?

When you receive these information sheets, you will also have an appointment to attend Albert Ward.

All your medications will be ordered and dispensed from Albert Ward on a monthly basis. You will be given a card to have blood tests (at your GP or at your nearest hospital phlebotomy unit) – please let us know when the tests have been done so that we can follow up the results.

In between visits to Albert Ward, you will be seen in the outpatient clinic.

Treatment for side effects caused by the steroid and immunosuppressant drugs

Throughout the six months, given each month from CAPD:

- Omeprazole 20mg once daily (stomach protection)
- Alendronate 70mg once a week (bone protection)
- Nystatin 1ml four times a day (fungal protection)
- Septrin 480mg once daily (pneumonia protection)

Month 1

- Methylprednisolone 1g on 3 consecutive days (intravenous - administered into the vein) followed by oral prednisolone tablets for the remainder of month.
- Monthly clinic visit with full blood count, cholesterol, glucose, renal profile and urine test.

Month 2

- Oral Cyclophosphamide (2mg/kg or 1mg/kg if aged 75 years or over).
- Weekly full blood count, liver function test.
- Monthly clinic visit with full blood count, glucose, cholesterol and renal profile, urine test.

Month 3

- Methylprednisolone 1g on 3 consecutive days (intravenous - administered into the vein) followed by oral prednisolone tablets for the remainder of month.
- Monthly clinic visit with full blood count, cholesterol, glucose, renal profile and urine test.

Month 4

- Oral Cyclophosphamide (2mg/kg or 1mg/kg if aged 75 years or over).
- Weekly full blood count, liver function test.
- Monthly clinic visit with full blood count, cholesterol, glucose and renal profile, urine test.

Month 5

- Methylprednisolone 1g on 3 consecutive days (intravenous - administered into the vein) followed by oral prednisolone tablets for the remainder of month.
- Monthly clinic visit with full blood count, cholesterol, glucose, renal profile and a urine test.

Month 6

- Oral Cyclophosphamide (2mg/kg or 1mg/kg if aged 75 years or over.
- Weekly full blood count, liver function test.
- Monthly clinic visit with full blood count, cholesterol, glucose and renal profile, urine test.

After the treatment finishes

All patients will be reviewed after the 6 month treatment period and an individualised post regime plan will be decided.

Further information

National Kidney Federation

www.kidney.org.uk/Medical-Info/kidney-disease/memb-neph.htm

For further information about the Trust, visit our website www.royalberkshire.nhs.uk

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This document can be made available in other languages and formats upon request.

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