



Anti Glomerular Basement Membrane (GBM) Disease (formerly Goodpasture's syndrome)

This leaflet explains what GBM Disease is and how it is treated, including possible side effects of medication.

What is Anti Glomerular Basement Membrane (GBM) Disease?

GBM is a type of vasculitis (inflammation of blood vessels) that can affect the kidneys and the lungs. (GBM used to be called Goodpasture's syndrome.)

What causes it?

The body normally produces antibodies to fight off infection and disease. In this case, your body makes an antibody that can attack and damages a membrane in your kidneys and lungs.

What symptoms might I have?

You may feel short of breath and cough up blood.

The kidney damage may cause blood-stained or frothy urine (pee) or actual kidney failure.

Is it serious?

Without treatment, the condition can be life-threatening. In some cases, it may be too advanced for treatment to save the kidneys and dialysis will be necessary. However, powerful treatment is now very successful in saving lives and kidney function if started in good time.

Inpatient treatment

As soon as diagnosis is made (using blood tests or a kidney biopsy), treatment will start with *Prednisolone* (steroid) and *Cyclophosphamide* (immunosuppressant).

- *Prednisolone* 1mg/Kg of body weight (max 60mg)
- *IV Cyclophosphamide*
- Plasma exchange daily until antibody negative

Discharge medication (Week 1)

Your kidney doctor and nurse specialist will discuss all of your medication with you, including the regimes and any possible side effects.

<i>Prednisolone</i>	Inpatient dose
<i>Lansoprazole</i>	30mg daily
<i>Alendronate</i> (non-dialysis)	70mg weekly
<i>Nystatin</i>	1ml four times a day
<i>Septin</i>	480mg daily

Outpatient treatment

The condition is dangerous, requiring powerful treatment that can have serious side effects. You will be seen often and monitored carefully. Your blood will be checked for its white cell count (WCC) to check how it would respond to infection. Visits will initially be weekly and gradually become less often as drug doses are reduced.

Week 2	<i>Prednisolone</i> 45mg	
Week 3	<i>Prednisolone</i> 30mg	
Week 4	<i>Prednisolone</i> 25mg	Stop Nystatin
Week 5	<i>Prednisolone</i> 20 mg	
Week 6	<i>Prednisolone</i> 20 mg	
Week 9	<i>Prednisolone</i> 20/15 alt day)	
Week 12	<i>Prednisolone</i> 15mg	Stop <i>Septtrin</i> & <i>Lansoprazole</i>
Month 4	<i>Prednisolone</i> 10mg	
Month 5	<i>Prednisolone</i> 5mg	Stop <i>Alendronate</i>
Month 6	Stop <i>Prednisolone</i>	

Some possible side effects of the treatment:

Prednisolone:

- Infection: Steroids make you more prone to 'opportunistic infection' (so-called, because they only affect vulnerable people). You will be given antibiotics (*Septtrin* and *Nystatin*), to protect against thrush and pneumonia. If you have had previous TB exposure, you will be given *Isoniazid*. **If you develop fever, cough, 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, provided your kidney function is not too severely affected.
- Stomach irritation: You will be given *Lansoprazole* 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. (Advice is available from the renal dietician in clinic.)
- 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. It may also make the larger muscles weaker.
- Blood pressure: A degree of fluid retention may cause your blood pressure to rise.
- Mood: Some patients find steroids cause mood disturbance, such as mood change, psychosis, insomnia.

Cyclophosphamide:

- Low white cell count with risk of severe infection.
- Thrombocytopenia (reduced number of platelets, which can result in bleeding/bruising).
- Inflammation and bleeding from the bladder.
- Hair may become slightly thinner / alopecia but no complete loss of hair.
- Nausea and occasional vomiting – rare.

- There may be an increased risk of cancers (such as bladder and bone marrow) depending on the total dose. However, current doses are considerably less than prescribed in the past.
- Pulmonary fibrosis – very rare.
- Possibility of reduced fertility.
- Sustained amenorrhoea (no periods) in women over 31 years on a long course of treatment.

Further information

Vasculitis UK website: <https://www.vasculitis.org.uk/about-vasculitis/anti-gbm-goodpastures-disease>

Contacting us

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To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

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