IgA Nephropathy (IgA kidney disease)

What is IgA?
IgA (immunoglobulin A) nephropathy (kidney abnormality) is one of the most common causes of kidney inflammation. It is more common in people of Asian and Caucasian decent. There is a broad spectrum of severity of this disease. The more mild disease can present just with a small amount of blood (detectable only by laboratory tests). In the more severe forms of IgA nephropathy there may be permanent irreversible kidney damage, which may progress to kidney failure.

Although we are not clear why some people develop IgA nephropathy and some do not; we do know that it is related to the IgA which circulates in the blood.

What causes IgA kidney disease?
Infection from any source will lead to the body's production of IgA. IgA is an antibody that the body naturally produces to fight infection. The infection may be caused by any organism – e.g. a virus from the common cold; diarrhoeal illness; skin infection from broken skin. In response to the infection the body produces IgA in order to protect itself. For an unclear reason this IgA may then cause inflammation in the kidney leading to kidney damage. Often the damage in the kidney is temporary and transient.

Sometimes the damage to the kidney is irreversible and may be progressive. Indicators of a poorer outlook include:
1. reduced kidney function at the time of diagnosis;
2. heavy proteinuria (protein in the urine);
3. hypertension (high blood pressure);
4. scarring of kidney tissue – usually requires a kidney biopsy to clarify the presence or absence of scarring.

The diagnosis is usually confirmed by a kidney biopsy although a kidney biopsy may not always be necessary. A kidney biopsy along with its benefits and risks are discussed elsewhere.

Symptoms
IgA nephropathy is frequently free of any symptoms and is only diagnosed after routine testing for another purpose (e.g. insurance or health medicals). Sometimes IgA disease presents with visible blood in the urine (macroscopic haematuria) and this can occur around the time of an infection. The classic example is when the affected person gets a sore throat or cold then within a few days they will see blood in their urine. The blood may persist for several days or only occur once. This is called synpharyngitic macroscopic haematuria because it occurs at the same time as the sore throat or illness.

IgA nephropathy is often confused with a condition called post-infectious glomerulonephritis where the blood is noticed in the urine later (around 2 weeks) after the sore throat or cold.

This IgA nephropathy information sheet is produced in the interest of patient education. It is not a replacement for good medical advice. This information sheet should be used in conjunction with reputable therapy and information from your health professional. This information is written expressly for the consumption within the practice of internal medicine and nephrology is New Zealand. Whilst it may be applicable to the practice of nephrology in other countries or situations, it should be read with this limitation in mind.
What treatment is there?
No specific IgA nephropathy treatment exists. Antibiotics make no difference to the course of the disease. Referral to a kidney specialist or on-going follow up with a kidney specialist may be appropriate particularly if there is high blood pressure, reduced kidney function, or protein in the urine.

Drugs are often used to minimise the protein in the urine and ensure that the blood pressure control is maximised. Blood pressure goal is usually below 130/80mmHg although lower values are frequently favoured.

Angiotensin Converting Enzyme inhibitors (ACEi) and Angiotensin Receptor Blockers (ARB) are the usual drugs to control blood pressure and reduce protein in the urine. The benefit of these classes of drugs is that they protect the kidneys in two ways – by both reducing the protein in the urine and by lowering blood pressure.

Sometimes ACEi and ARB’s are used in combination and sometimes they are used with other drugs in order to achieve the blood pressure control.

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