



## IgA Nephropathy (RRC)

Glomerulonephritis is the commonest cause of kidney damage and failure of kidney function which may result in the need for dialysis (artificial kidney treatment) and/or a kidney transplant. There are many different types of glomerulonephritis but IgA Nephropathy is the most common type in Australia. It is found more often in males than females. About 10–30% of people with IgA Nephropathy have progressive deterioration of kidney function leading to what is called irreversible or end stage kidney (renal) failure. In Australia, 11% of all patients on dialysis have IgA Nephropathy.

## How is it diagnosed?

While IgA Nephropathy occurs in all age groups, it is usually diagnosed before the age of 30 years. It is common in children but the peak incidence is between 15–25 years. Usually, the passage of blood in the urine (macroscopic haematuria) making it coffee or tea coloured, is one of the signs for which the person sees a doctor. This is usually associated with a sore throat or respiratory infection or diarrhoea and vomiting, and may occur again in association with such infections. In some people who may have very few symptoms of severe illness, the only clue may be the finding of blood cells or protein or both (these are referred to as haematuria and proteinuria) in the urine on a routine urine test.

The final diagnosis of IgA Nephropathy can be made only by a kidney biopsy – after a local anaesthetic, a sample of kidney tissue is removed by a needle and then examined under a microscope.

Why is it called IgA Nephropathy and how is it caused?

IgA Nephropathy is sometimes called Berger's disease as a French doctor, Jean Berger, was the first to describe it. Nephropathy simply means kidney disease. The antibody IgA (Immunoglobulin A), derived from the lining of the throat, air passages and intestine is found in the kidney and has caused damage to the kidney. The precise mechanism is not yet certain and is the subject of much medical research. It is thought that some people produce too much IgA antibody when their body is fighting infections of the throat, tonsils, lungs and intestines and yet the antibody produced is not as efficient in eradicating the infection as it is in most people. As a result, the antibody combines with the infecting organism (antigen), circulates in the blood and lodges in the glomerulus (the filtering mechanism of the kidney) where it causes inflammation (nephritis) which may progress to more severe kidney damage, recognised as IgA Nephropathy.

The course of the disease

The majority of people with mild IgA Nephropathy have a good outlook and the disease may remit for long periods or disappear altogether. Even these people however may suffer from episodes of obvious blood in the urine if they develop another infection, and may develop high blood pressure and deterioration of kidney function as they grow older. In those with more severe damage to their kidneys (10–30%), kidney function declines and end-stage renal failure may occur within 3–30 years. In these people dialysis and/or kidney transplant will be required. IgA Nephropathy can occur in a transplanted kidney but in most cases this is in a mild form and does not significantly influence the function of the transplanted kidney.

Follow up

Because of the uncertain outlook, it is recommended that all people found to have IgA Nephropathy, even in its mild form, should be seen by their general practitioner and kidney specialist at regular intervals. Indeed healthy individuals with the disease should have

blood pressure checks and urine examinations made by their doctor from time to time to pick up the first signs of any problems.

Although not usually inherited, IgA Nephropathy has been found in members of the same family. So close relatives of a person with it should have their urine tested for blood and protein and a blood pressure check.

In those who have IgA Nephropathy regular tests of kidney function are necessary because progressive kidney failure can be detected by these tests. Even if someone with IgA Nephropathy appears to be stable, a regular review by a kidney specialist is important.

## Treatment

So far there is no curative treatment for IgA Nephropathy. At present the most promising treatments include blood pressure lowering agents (called ACE inhibitors and/or Calcium Channel Blockers). Appropriate treatment including antibiotics for infections and diet will help in many cases, as will restriction of alcohol and tobacco intake.

However, if people have severe IgA Nephropathy, treatment with dialysis or a kidney transplant usually allows them to continue to lead an active and satisfactory life.