Multicystic Dysplastic Kidney

Multicystic dysplastic kidney is a condition that occurs when one of the kidneys doesn’t develop correctly in the womb before birth. The kidneys begin to develop at around the 5th or 6th week of pregnancy. If something goes wrong during the development of the kidneys, it is possible to end up with one kidney that does not work as it is full of cysts and scar tissue. The remaining kidney is usually able to take over all of the necessary kidney function.

Multicystic dysplastic kidney should not be confused with polycystic kidney disease, which is a condition affecting both kidneys that gradually gets worse over time.

**How common is it?**

Multicystic dysplastic kidney is thought to affect 1 in every 3,500 people. That number may actually be higher because some people who have it are never diagnosed. It occurs more frequently in boys than in girls, and is most common in people of Caucasian background.

There are rare cases when multicystic dysplastic kidney runs in families because of a hereditary condition. However, most cases occur without any family history. The proper development of your kidneys is complex with hundreds of thousands of steps that must occur correctly. If there is a problem in just one step, an abnormal kidney may form.

**Can it be prevented?**

The cause of multicystic dysplastic kidney is not known. In some cases it is likely that there was a blockage to the kidney that ended up causing the damage. There is no way to prevent multicystic dysplastic kidney from occurring early in a baby’s development.

**How is it diagnosed?**

Most cases of multicystic dysplastic kidney are discovered before birth. This is because it can be noticed on a pregnancy ultrasound.

Multicystic dysplastic kidney does not usually cause any symptoms.

The diagnosis of multicystic dysplastic kidney is usually made with an ultrasound examination. Occasionally other imaging techniques, such as nuclear scans may also be needed to confirm the diagnosis.
What are the complications?

The multicystic dysplastic kidney is not usually associated with any long-term complications. In some cases, there may be structural issues in the remaining kidney, but these conditions are usually able to be treated.

In children with multicystic dysplastic kidney, the normal kidney usually functions properly and easily does the work of two kidneys. It is recommended that your child sees a Nephrologist (kidney specialist) at least once to make sure the remaining kidney is healthy. Most people with multicystic dysplastic kidney have a normally functioning kidney for the remainder of their life.

There is no reason to adjust medication doses or to have a special diet, unless advised by a medical practitioner. Children with multicystic dysplastic kidney are usually able to play most sports, but should avoid certain high impact sports because of the potential risk to their one remaining kidney.

Please see the fact sheet Life with a single kidney for more information.

What is the treatment?

Multicystic dysplastic kidney requires no special treatment. Over time, the abnormal kidney usually shrinks and just goes away. Many people know someone who only has one kidney. These are often individuals who had a multicystic dysplastic kidney that shrank and vanished before it was diagnosed.

Regular ultrasounds to ensure that the kidney does shrink and the remaining kidney grows is usually recommended.

If you have multicystic dysplastic kidney, your doctor should give you a regular Kidney Health Check, which includes:

- Urine tests
- Blood tests
- Blood pressure test

- THINGS TO REMEMBER
  - Multicystic dysplastic kidney is when one kidney does not develop properly before birth and is full of cysts and scar tissue.
  - You can live a healthy life with one kidney.
  - Regular ultrasounds and a yearly kidney health check are the recommended treatments.
What does that word mean?

**Dysplastic** - Abnormal development or growth of tissues, organs, or cells.

**Hereditary** - Characters that are passed from parents to their children.

**Multicystic** - Many cysts.

**Cyst** - A sack full of fluid.

**Nephrologist** - A medical doctor who specialises in kidney function.

**Nuclear scan** - An imaging procedure that uses radioactive substances to show structures and functions inside your body.

**Ultrasound** - An imaging procedure that uses sounds waves to show structures and functions inside your body.

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For more information about kidney or urinary health, please contact our free call Kidney Helpline on 1800 454 363 or Kidney.Helpline@kidney.org.au.

Visit our website [kidney.org.au](http://kidney.org.au) to access free health literature.

This is intended as a general introduction to this topic and is not meant to substitute for your doctor's or health professional's advice. All care is taken to ensure that the information is relevant to the reader and applicable to each state in Australia. It should be noted that Kidney Health Australia recognises that each person's experience is individual and that variations do occur in treatment and management due to personal circumstances, the health professional and the state one lives in. Should you require further information always consult your doctor or health professional.

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