

Membranous Nephropathy (MN)

Overview and Symptoms

Membranous Nephropathy (MN) is a rare kidney disease characterized by thickening in the part of the kidney that filters blood: the glomerular basement membrane. The thicker membrane does not work normally and causes protein that belongs in the blood to be spilled into the urine.

Early symptoms of Membranous Nephropathy are the same as Nephrotic Syndrome:

- Swelling in parts of the body, most noticeably around the eyes, hands, feet, and abdomen (called **edema**)
- Protein in the urine, which can be foamy (called **proteinuria**)
- Can cause high blood pressure (called **hypertension**) and high fat levels in the blood (**high cholesterol**)
- Low levels of protein in the blood

Fast Facts

- The only way to differentiate Membranous Nephropathy from other primary Nephrotic Syndrome conditions is to have a kidney biopsy.
- MN occurs more frequently in adults than in children and is most prevalent in adults 40 years or older.
- MN is associated with less than 5% of all new cases of Nephrotic Syndrome in children each year.
- Some patients with Membranous Nephropathy are steroid-resistant.
- MN is the most common cause of primary Nephrotic Syndrome in Caucasian adults.
- 70-80% of primary MN patients have anti-PLA2R antibodies in their blood system. Learn more about the role of anti-PLA2R antibodies in primary MN at NephCure.org.

Membranous = the kidney membranes
Nephropathy = are damaged

MN is caused by the buildup of immune complexes within the kidney that form when a person's antibodies attack something foreign to the body.

Over time, MN may go into remission, remain stable, or cause gradual loss of kidney function.

Up to 40% of MN patients develop end stage kidney disease (ESKD).

High levels of the anti-PLA2R antibody are linked to a higher risk of Nephrotic Syndrome and ESKD.

Up to 40% of MN patients will go into a spontaneous remission without treatment.

Treating Your Disease

SHORT-TERM GOALS

The short-term goal of treatment is to stop protein from spilling completely (remission) or lower the amount of protein lost in the urine as much as possible.

LONG-TERM GOALS

The long-term goals of treatment include preventing relapses of protein in the urine and preventing the deterioration of kidney function.

There are no currently FDA-approved medication options for MN. The standard first-line treatment for MN is prednisone, a corticosteroid.

How to Live With Your Disease

1. **Following a low fat, low sodium diet** will help improve your kidneys' function and your MN symptoms.
2. **Finding a nephrologist that specializes in MN** that you trust is very important to your long-term health.
3. **Learn about your disease, treatment options, and clinical trials** in order to better advocate for yourself.
4. **NephCure Kidney International can help you connect with other patients** and find support to manage your disease.



NephCure is working every day to leverage support to find better treatments and a cure for rare, protein-spilling kidney diseases.

PLEASE VISIT [NEPHCURE.ORG](https://nephcure.org) TO LEARN MORE ABOUT MN AND NEPHROTIC SYNDROME.