



## NEPHROTIC SYNDROME

### 1) What is Nephrotic Syndrome?

It is a disease of the kidney when your child will develop swelling over the eyes, face and progressing all over the body. Some children might also have decreased urine, pain in tummy and fever when it is associated with infection.

### 2) What caused the Nephrotic Syndrome?

It occurs all over the world and the exact cause is not known but it is postulated to occur because of protein leak through the small filtering units in the kidney. In 95% case there is no damage to the kidney and the protein leak stops with treatment.

### 3) What investigations will be carried out?

The diagnosis of Nephrotic syndrome will be made on the basis of urine protein report (> 2+), urine Protein Creatinine Ratio, Serum albumin, Total Cholesterol and presence of swelling.

90% of children between 2-6 yrs of age have a Minimal Change Disease, which means no visible change in the kidney when viewed under a microscope. These children usually tend to have normal blood pressure, normal kidney functions and no red blood cells in the urine.

**Mantoux and Chest Xray** if required will be done to rule out Tuberculosis prior to starting steroids.

**Kidney Biopsy** : If the child does not fit in the above description then the plan for kidney biopsy might be discussed with the parents.

### 4) What is the treatment?

The treatment of Nephrotic Syndrome comprises of steroid. It comprises of tablets 5mg, 10mg, 20mg and 30mg. The therapy of first episode comprises of full dose steroid for 6 weeks followed by alternate day therapy for 6 weeks. They can be taken with a glass of milk or after food. Side effects of steroid will be explained and monitoring will be done accordingly.

### 5) Management of swelling?

The swelling will be managed by restricting of salt and if required medication to reduce the swelling which will be given under supervision. As the child is initiated on steroids, the swelling will be improved as the protein leak is reduced if the child has a steroid responsive course.

### 6) Indications of hospital admission?



When the child is having poor oral intake , dull, loose stools , high grade fever ,pain in the stomach and urine out put is reduced it is mandatory to seek specialist and plan for hospitalisation.

**DIARY FOR MAINTAINING FOR A CHILD WITH NEPHROTIC SYNDROME :**

Full dose daily steroids - 6 weeks	Date of initiation	Date of stopping
Alternate Day steroids -6 weeks	Date of initiation	Date of stopping

**TREATMENT OF RELAPSE:**

Full dose steroid - 2 weeks	Date of initiation	Date of stopping
Alternate day steroids - 4 weeks	Date of initiation	Date of stopping

**TREATMENT OF RELAPSE:**

Full dose steroid - 2 weeks	Date of initiation	Date of stopping
Alternate day steroids - 4 weeks	Date of initiation	Date of stopping



DATE	Urine albumin		Date	Urine albumin

### How to measure protein leak at home?

1. Collect the first morning urine into a clean container.
2. Take one strip out of the bottle, and close the bottle tightly.
3. Dip the strip into the urine quickly. Be sure the square on the tip is wet with urine.
4. Place the strip on a flat surface and wait 60 seconds.
5. Compare the color of the stick to the colors on the bottle.
6. Record the value: the packaging should show you which range(s) indicate “normal.”

### Image Gallery:

1)



The urine dipstick which can be used to check for protein leak at home.

## 2) Normal Kidney in Human Body and normal vs abnormal kidney in children with Nephrotic Syndrome

