

## NEPHROTIC SYNDROME: AN AYURVEDIC REVIEW

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## ABSTRACT

Nephrotic syndrome is a kidney disorder that occurs when there is damage to the small blood vessels in the kidneys that filter waste and excess water from the blood. This results in the leakage of protein into the urine, leading to proteinuria and other symptoms such as edema, hypoalbuminemia, and hyperlipidemia. It is a common disease among children, and it can lead to severe complications if left untreated, as its incidence is increasing worldwide. Ayurvedic management of nephrotic syndrome is a holistic approach that involves dietary changes, lifestyle modifications, and the use of natural herbs and supplements. This article aims to explore the Ayurvedic management of nephrotic syndrome in children.

## INTRODUCTION

## Causes of nephrotic syndrome

The exact cause of nephrotic syndrome is not yet fully understood, but several factors can contribute to its development. Some of the common causes of nephrotic syndrome in children include:

- **Minimal change disease:** This is the most common cause of nephrotic syndrome in children. It occurs when the small blood vessels in the kidneys become damaged, leading to the leakage of protein into the urine.
- **Focal segmental glomerulosclerosis:** This occurs when the scar tissue forms in the kidneys, leading to protein leakage.
- **Membranous nephropathy:** This occurs when the immune system attacks the kidneys, leading to the leakage of protein.
- **Systemic lupus erythematosus:** This is an autoimmune disease that can affect various parts of the body, including the kidneys.

## Management through ayurveda

Ayurveda is a holistic medical system that originated in India over 5,000 years ago. Ayurvedic management of nephrotic syndrome in children is based on the principles of balancing the three doshas – *Vata*, *Pitta*, and *Kapha* – and restoring the normal functioning of the kidneys. Ayurvedic treatment involves a combination of dietary modifications, herbal remedies, and lifestyle changes. It is based on the belief that the body has the power to heal itself if given the right environment and support.

## Dietary changes

Diet plays a crucial role in the management of nephrotic syndrome. Children with this condition need to follow a healthy diet that is low in salt and protein. Incorporate a variety of fruits and vegetables into the diet, as they contain antioxidants and other nutrients that can help to reduce inflammation and promote healing. Foods that are high in potassium, such as bananas, spinach, and sweet potatoes, should be avoided, as they can cause hyperkalemia in children with kidney disease. Some of the dietary changes that can be helpful include:

• **Reduce protein intake**

One of the essential components of diet for nephrotic syndrome is to reduce protein intake. Excessive protein consumption can increase the workload on the kidneys and worsen the condition. Reduce the intake of high-protein foods such as red meat, chicken, fish, dairy products, and legumes. Instead, it recommends incorporating low-protein foods such as vegetables, fruits, grains, and nuts. Ayurvedic diet also emphasizes the consumption of easily digestible protein sources such as milk, paneer, and tofu.

• **Increase intake of fiber-rich foods**

Fiber-rich foods play a vital role in the management of nephrotic syndrome, consumption of whole grains, fruits, and vegetables that are high in fiber. Fiber can help regulate blood sugar levels, reduce inflammation, and prevent constipation.

• **Include anti-inflammatory foods**

Inflammation is a common feature of nephrotic syndrome. Including anti-inflammatory foods such as ginger, turmeric, Garlic and Cinnamon in the diet helps to reduce inflammation and prevent further damage.

- **Drink plenty of fluids**

Staying hydrated is essential in the management of nephrotic syndrome, drinking of fluids such as water, coconut water, and herbal teas can help flush out toxins from the body, reduce inflammation, and prevent fluid retention.

- **Avoid processed foods**

Processed foods are high in salt, sugar, and preservatives, which can worsen nephrotic syndrome. Ayurvedic diet recommends avoiding processed foods and consuming fresh, whole foods that are rich in nutrients.

- **Low-salt diet**

Salt can cause fluid retention, which can worsen swelling in children with nephrotic syndrome. Therefore, it is essential to limit the intake of salt in their diet. Reduce the intake of processed and packaged foods that are high in sodium. It also recommends cooking meals at home using natural herbs and spices instead of salt.

- **Low-protein diet**

A low-protein diet can help reduce the workload on the kidneys and prevent further damage. However, it is crucial to ensure that children still receive adequate amounts of protein from other sources, such as dairy products, legumes, and grains.

- **High-carbohydrate diet**

Carbohydrates can provide the body with the energy it needs to function properly. Therefore, it is essential to include plenty of complex carbohydrates in the diet, such as whole grains, fruits, and vegetables.

- **Avoid processed foods**

Processed foods are often high in salt and preservatives, which can worsen the symptoms of nephrotic syndrome. It is essential to avoid processed foods and opt for fresh, whole foods instead.

### Lifestyle modifications

In addition to dietary changes, lifestyle modifications can also be helpful in managing nephrotic syndrome. Some of the lifestyle modifications that can be beneficial include:

- **Regular exercise:** Exercise can help improve blood circulation, reduce swelling, and maintain a healthy weight. However, it is crucial to avoid strenuous activities that can put a strain on the kidneys.
- **Adequate rest:** Rest is essential for the body to heal and recover. Children with nephrotic syndrome should ensure they get adequate rest and avoid overexerting themselves.
- **Stress management:** Stress can worsen the symptoms of nephrotic syndrome. Therefore, it is essential to manage stress through techniques such as meditation, yoga, or breathing exercises.
- **Maintaining a healthy weight**

### Ayurvedic herbal Drugs and Panchkarma

Ayurvedic medicines and Panchakarma can be beneficial in managing nephrotic syndrome in children. Ayurvedic medicines are derived from natural herbs and supplements and can help improve kidney function, reduce inflammation, and prevent further damage. Panchakarma is a series of cleansing and rejuvenating treatments that can help remove toxins from the body and improve overall health. Let's take a closer look at Ayurvedic medicines and Panchakarma in the management of nephrotic syndrome in children.

### Herbal drugs

- **Punarnava (*Boerhavia diffusa*):** Punarnava is a powerful diuretic herb that helps to reduce edema and excess fluid retention in the body. It also has anti-inflammatory properties that can help to reduce swelling and inflammation in the kidneys.
- **Gokshura (*Tribulus terrestris*):** Gokshura is a natural diuretic that helps to increase urine output and reduce edema. It also has a tonic effect on the kidneys, which can help to improve their function.
- **Daruharidra (*Berberis aristata*):** Daruharidra is a natural anti-inflammatory herb that can help to reduce inflammation in the kidneys. It also has astringent properties that can help to reduce proteinuria.
- **Shatavari (*Asparagus racemosus*):** Shatavari is a rejuvenating herb that helps to strengthen the immune system and improve the overall health of the kidneys.
- **Triphala:** Triphala is an herbal supplement which consist of three herbal drugs *Amalaki (Embllica officinalis)* *Haritiki(Terminalia chebula)* *Vibhitki(Terminalia bellirica)* that can improve digestion, reduce inflammation, and detoxify the body. It can also help improve kidney function and prevent further damage.

### Role of panchakarma

- **Virechana:** Virechana is a cleansing treatment that involves the use of herbal purgatives to remove toxins from the body. It can help improve kidney function and reduce inflammation.
- **Basti:** Basti is a medicated enema that involves the use of herbal oils and supplements to cleanse the colon and improve digestion. It can help reduce inflammation and improve kidney function.
- **Abhyanga:** Abhyanga involves the use of herbal oils to nourish the body and improve circulation. It can help reduce stress and improve overall health.
- **Shirodhara:** Shirodhara is a treatment that involves the pouring of warm herbal oils on the forehead to calm the mind and reduce stress. It can help improve mental health and reduce inflammation.

### CONCLUSION

In conclusion, Ayurvedic diet plays a vital role in the management of nephrotic syndrome. It emphasizes the consumption of a balanced and nourishing diet that is

low in protein, high in fiber, and rich in anti-inflammatory foods. Ayurvedic diet also recommends reducing sodium intake, avoiding processed foods, and staying hydrated. Incorporating these dietary changes can help improve kidney function, reduce inflammation, and prevent further damage in individuals with nephrotic syndrome. Ayurvedic management of nephrotic syndrome in children is a holistic approach that involves dietary changes, lifestyle modifications, and the use of natural herbs and supplements. Ayurvedic medicines and Panchakarma can be beneficial in improving kidney function, reducing inflammation, and preventing further damage. However, it is essential to consult an Ayurvedic practitioner before starting any new treatment to ensure it is safe and effective for the child. With proper management and care, children with nephrotic syndrome can lead healthy and fulfilling lives.

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