WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.074
Volume 7, Issue 13, 574-577. Case Report ISSN 2277– 7105

A CASE REPORT ON STEROID RESISTANT NEPHROTIC SYNDROME (SRNS)

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Article Received on
11 May 2018,

Revised on 02 June 2018,
Accepted on 23 June 2018,

DOI: 10.20959/wjpr201813-12713

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ABSTRACT

Intro: Steroid Resistant Nephrotic Syndrome (SRNS) is a disease that causes abnormalities in kidney function, often leads to kidney failure. 70-90% Nephrotic Syndrome (NS) cases under the age of 10 years and 50% NS cases in between 10-15 years children are due to Minimal Change Disease (MCD). In most of the cases the underlying cause for SRNS is not known. Symptoms such as excess of cholesterol and triglycerides in the blood, presence of proteinuria, shortage of protien in the blood. SRNS requires kidney biopsy to define histopathology. Nephrotic syndrome makes people vulnerable to infections while they are swollen and also increase their risk of developing thrombosis. Management of children with SRNS requires confirmation of resistance to a particular drug in corticosteroids for a minimum of 8 weeks. **Case Report**: A 5 years old male child came with the complaints of swelling of the face followed by swelling of the body, increase in weight since 2 months and foamy urine since 10 days. The child was asymptomatic 2 months back then slowly developed swelling of face and the body. Child was known case of NS, biopsy proven MCD 2 years back, was on regular Prednisolone therapy 15mg bd, Metolazone 2.5 mg od since 3 years. Based on the physical examination and clinical features patient was diagnosed as Steroid Resistant Nephrotic Syndrome.

KEYWORDS: Proteinuria, Corticosteroids, Triglycerides, Cholesterol, MCD.

INTRODUCTION

Nephrotic Syndrome (NS) is a most common forms of kidney disease seen in children.

It is a condition when the kidneys loose maasive amount of protein, the blood protein level gets low, so the fluid starts leaking from the vessel and patient gets puffy. Steroid Resistant Nephrotic Syndrome (SRNS) is responsible for 20% of all cases of NS in children, however

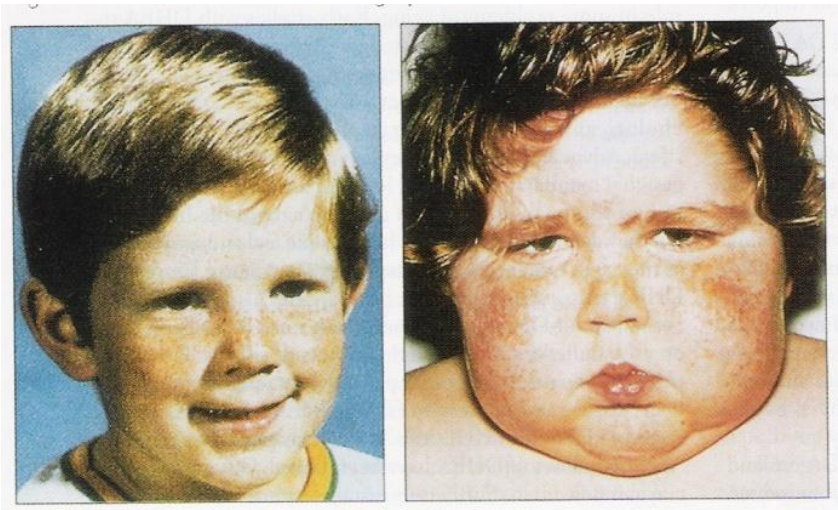
SRNS variant is the most common glomerular cause of End Stage Kidney Disease (ESKD) in children. SRNS is charecterised by different pathological changes on kidney biopsy, in children the most common histological varients are Focal Segmental Glomerulosclerosis (FSGS) and Minimal Change Disease (MCD).

CASE REPORT

A 5 year old male child was admitted in pediatrics department in a tertiary care hospital with the chief complaints of weight loss since 2 months, child was apparently alright 2 months back started increasing weight. Child was known case of NS, biopsy proven MCD 2 years back, was on regular therapy Prednisolone 15mg bd, Metolazone 2.5mg od, Cipcal 100mg since 3 years. On the day of admission the child was afebrile, conscious and coherent and his blood pressure was 120/70 mmHg, moon like face+(prominent cheeks), prominent neck fat+. LABORATORYFINDINGS: Laboratory investigations revealed decrease in protein in the blood, 24 hours urinary protein- 0.09, Haemoglobin level was 11gm%.

TREATMENT

Child was treated with tablet prednisolone 5 mg od, tablet rantac 5mg bd, tablet Bcomplex od and tablet metolazone 2.5mg od and same treatment was continued for 3 days and observed for futher treatment other than steroids.



DISCUSSION

NS is a disorder of Glomerular filteration barrier. SRNS is uncommon in children, but often leads to End Stage Renal Disease (ESRD). In Adults SRNS can be defined as the presence of proteinuria after 6 months of therapy, presence of edema, hyperlipidemia, hypoalbuminia.

SRNS is confirmed when the patient is not responding to prednisolone therapy for 4 weeks. When compared maximum number of SRNS cases, in that 20-25% cases of MCD will manifest with steroid resistance. SRNS is quite often due to Focal Segmental Glomerulo Sclerosis(FSGS) in adults, variying from 8 to 28%, as FSGS is a heterogenous disorder and the most severe and frequent type of all Glomerulo Nephritis(GN) in children leading to ESRD, so in that caes 50% of the children requiring renal replacement therapy.

SRNS may be also due to Membranous glomerulonephritis (MN-40%) or Membrane Proliferative glomerulo Nephritis (MPGN-7%). Renal histology in SRNS helps in predicting response to steroid therapy. Patients with SRNS are at high risk of extrarenal complications of NS, as well as the progression of their kidney disease to either Chronic Renal Insufficiency (CRI) or ESRD.

CONCLUSION

We found that resistance to any immunosuppressive therapy increased the risk of resistance to other immunosuppressive therapy. Resistance to immunosuppressive drugs can lead to progression of ESRD. We also concluded that in this case the child was diagnosed as SRNS, he was prescribed with low dose of prednisolone, but cyclosporine is more effective as initial therapy for patients with SRNS.

ABBREVATIONS

SRNS – Steroid Resistant Nephrotic Syndrome

NS – Nephrotic Syndrome

MCD – Minimal Change Disease

FSGS – Flocal Segmental GlomeruloSclerosis

ESRD – End Stage Renal Disease

GN – Glomerulo Nephritis

MPGN – Membrane Proliferative Glomerulo Nephritis

MN – Membrane glomeruloNephritis

CRI – Chronic Renal Insufficiency

REFERENCE

1. Hasan Otukesh, Salman Otukesh., et al., Iranian journal of kidney diseases, 2009; 3.
2. Kidney International Supplements, 2012; 4: 172-176.
3. Kevin D. Mc Bryde, et al., Curr probi pediatr, 2001.

4. Jerome C Lane, et al., Pediatric Nephrotic Syndrme Treatment and Management, 2016.
5. Gulati A, Bagga A, et al., Indian Society of Pediatric Nephrology, Management of SRNS, 2009.