

# Clinical response, efficacy and changes of Immune function with Rituximab treatment in childhood difficult to treat nephrotic syndrome

To identify remission, relapse, Changes in immune function in difficult to treat childhood nephrotic syndrome

 Single center  
Prospective interventional

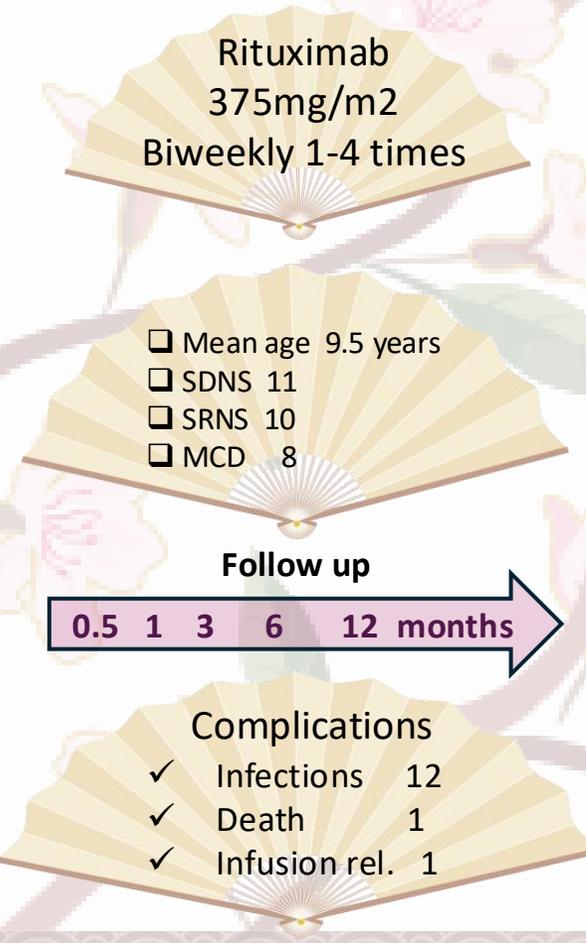
 Two-year study

 N=21

 1-18years

**Inclusion criteria**

- ❖ SDNS
- ❖ No response to steroids
- ❖ Steroid toxicity
- ❖ SRNS
- ❖ No remission with CNI
- ❖ CNI toxicity



<b>Remission</b>
SDNS 11/11 SRNS 4/10
Complete Remission 11 Partial remission 4 No remission 6
<b>Relapse No.</b>
SDNS 4 (6 months) 3 (one year) SRNS 3 (6 months) 3 (one year)
<b>Rituximab dose and Remission</b>
One dose 11 Two doses 3 Three doses 1

**Changes in immune function**

Decreased levels of CD 19  
Recovered within 9-10 months

IgA }  
IgM } Stable levels pre/post treatment  
IgG }

**Conclusion:** Rituximab led to CR in 11/21 children with DTT nephrotic syndrome, achieving complete remission in all children with SDNS and in 4 children with SRNS. 57% of the children had infections while 23% had no complications. 1/3rd of children with B cell depletion recovered within 9 to 12 months and the pre / post treatment serum levels of IgG , IgA and IgM did not change in the study cohort.

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