Immunoadsorption is efficient in patients who failed to respond to plasma exchange and rituximab for treatment of recurrent FSGS

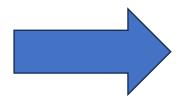
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Introduction

- The focal segmental glomerulosclerosis FSGS recurrence rate after renal transplantation exceeds 50%
- The rapid recurrence of proteinuria in some patients with FSGS immediately after transplantation suggests possible injury of podocytes by a circulating permeability factor



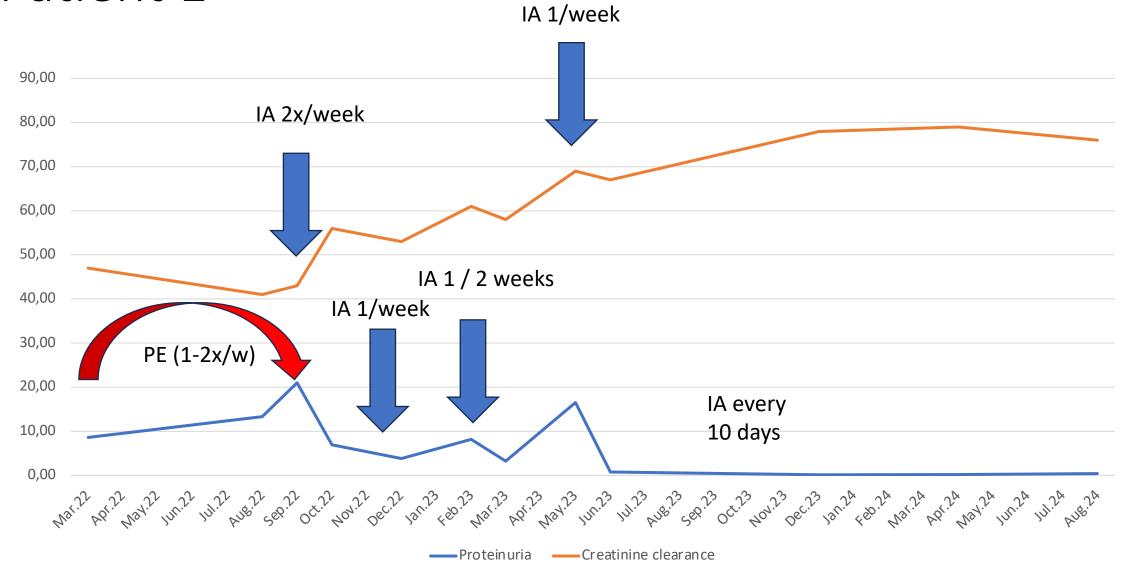
Plasma exchange is used to remove the factors from the blood and alleviate the disease, and **rituximab** influences the formation of the permeability factor but with variable response rates

 Data on the efficacy of immunoadsorption (IA) in treating FSGS recurrence is scarce

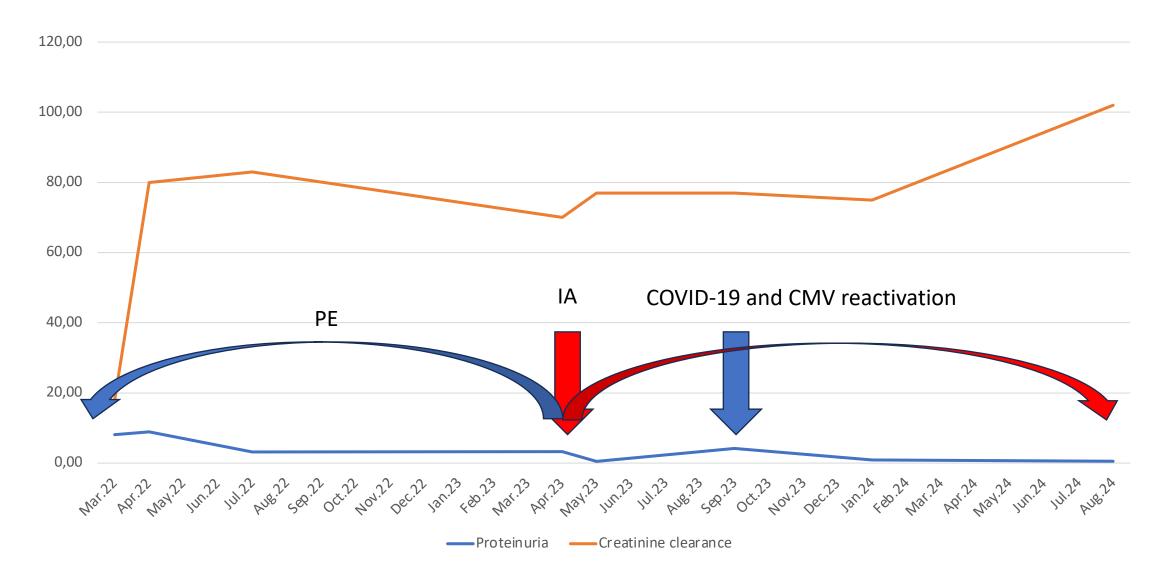
Technical background

- We describe two patients with FSGS recurrence who failed to respond to rituximab and plasma exchange treatments and underwent immunoadsorption
- IA procedures were performed with a protein A column (Immunosorba, Art/Adasorb, Fresenius Medical Care)
- Adsorbers were replaced when the reduction of IgG was <80% or in case of a technical problem
- 1.5 plasma volume was processed per each session
- Citrate anticoagulation

- A 21-year-old male underwent his second kidney transplantation from a deceased donor in February 2022 after the loss of the first allograft one-month posttransplant due to recurrent FSGS unresponsive to rituximab and plasma exchanges
- Tacrolimus, prednisone, MMF maintenance
- Rituximab applied in two doses and 14 plasma exchanges, recurrent FSGS after the second transplant resulted in progressive proteinuria reaching 20.9 g/day
- In September 2022, he was started with immunoadsorption twice a week



- A 46-year-old man experienced a recurrence of FSGS in the early posttransplant period with proteinuria 7.57 g/day despite the rituximab and plasma exchange treatment
- Delayed graft function
- He underwent 32 PEs with the lowest proteinuria 3.5 g/day
- In April 2023, he was switched to IA



Conclusion

 In our patients who failed to respond to PE and rituximab, immunoadsorption was found to be efficient for treating FSGS recurrence