

2<sup>nd</sup> International Conference

## **HUS-MPGN-PNH**

Current diagnosis and therapy of thrombotic microangiopathies: hemolytic uremic syndrome (HUS), membrano proliferative Glomerulonephritis (MPGN) and paroxysmal nocturnal Hemoglobinuria (PNH)

## Abstract form (in English)

Title (in capitals)

Authors//Institution/ Department Text **Structure:** The aim of the study Methods Results Conclusion Please, type using the **Times** New Roman, large 12 To be sent to: Prof. LB. Zimmerhackl, Dptm. of Paediatrics Anichstraße 35. A-6020 Innsbruck, using the E-mail and paralelly the air/surface mail, dead-line May 3, 2010!

## SUCCESSFUL KIDNEY TRANSPLANTATION IN 4 PATIENTS WITH FACTOR H DEFICIENCY-HUS

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**Aim of the study**: Factor H deficiency hemolitic uremic syndrome (FHD-HUS) has a very high risk of recurrence after kidney transplantation (KTx). Refraining from KTx, combined liver-KTx or KTx followed by lifelong plasmaexchange (PLE) have been proposed for patients with ESRD due to FHD-HUS with contrasting results. Herein we describe our protocol for KTx in FHD-HUS, which proved to be successful in all the patients we have treated so far.

**Methods**: Four patients (age range 5-36 yrs) with CKD5 due to documented FHD-HUS underwent KTx following one PLE before KTx and several maintenance PLEs and fresh frozen plasma infusions after KTx, according to the protocol shown in the table:

| Time          | PLE     | Plasma Infusion | Frequency       |
|---------------|---------|-----------------|-----------------|
| Pre-KTx       | 75ml/kg | 1000 ml         | Once            |
| POD 1-5       | 75ml/kg | no              | Daily           |
| POD 6-7       | 50ml/kg | no              | Daily           |
| POD 8-17      | 50ml/kg | 25ml/kg         | Alternate day   |
| POD 18 to 26  | 50ml/kg | no              | Every other day |
| POD 27-41     | 50ml/kg | no              | Every 5 days    |
| POD 42 to 180 | STOP    | 20ml/kg         | Weekly          |

Legend: POD: Post KTx day

Immunosuppressive protocol included basiliximab, tacrolimus or cyclosporine, MMF and prednisone. We emphatize that all patients were addressed to KTx with a significant fluid overload (as much as 3% above optimal body weight) obtained with plasma infusion.

**Results**: Over a cumulative observation period of 61 mos., we observed only 2 recurrences (in 2 different patients) which were managed with PLE (1 case) and Eculizumab (1 case) with immediate recovery from the recurrence.

**Conclusions**: Our therapeutic approach to TKx in FHD-HUS represents a less aggressive solution in the meantime that Factor H becomes available for maintenance treatment.

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