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RENAL TRANSPLANTATION. TREATMENT AND IMMUNOSUPPRESSION

SP767 THROMBOTIC MICROANGIOPATHY RELATED TO KIDNEY TRANSPLANTATION:A MULTICENTRE RETROSPECTIVE STUDY

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INTRODUCTION: Thrombotic microangiopathy (TMA) related to kidney transplantation (KTx) is a life-threating and infrequent condition driven by complement system which need a multicentre study approach. Therapy is based on Plasmapheresis (PLASMA) and Eculizumab® (ECU). ECU is a monoclonal antibody against human C5 available in Spain since 2011 that prevents C5b-9 complex production.

METHODS: Study Design: Multicentre retrospective cases study. Joint initiative from KTx Research Public Net and Genetic-Complement reference lab. An ethic committee approved this study.

Aim: to describe characteristic, therapy management and clinical outcomes and to explore risk factors.

Inclusion criteria: Case1: Profilaxis for TAM recurrence in patients with previous TAM diagnosis who receive a KTx (PRO group). Case 2: Proved TMA superimposed on KTx (Novo-TMA Group).

RESULTS: We include 33 patients from 9 hospitals.

PRO Group 11 patients (mean age 30.0 y) on dialysis after proved TMA, 8 of them with complement mutation. They received a graft (8 brain death-BDD, 1 cardiac death-CDD & 2 unrelated living donor LD) with thymoglobuline induction regimen. 8 patients receive pre-emptive ECU treatment according to guidelines and presented no any TMA recurrence. One case (without mutations) withdraw ECU after 1-month others still on it (mean 3,2 years). 3 other cases without ECU got 2 recurrences, 1 received ECU as rescue therapy and got complete remission, the other one lost their graft. All cases who receive ECU are still alive and with graft function. No single serious adverse event (SAE).

Novo-TMA Group 22 patients (aged 47,7, without previous TMA as component for ESRD) they had received a graft BDD (15), CDD (5) or LD (2).

15 patients presented an *early TMA* (2 to 14 days post KTx) 66% with immediate graft function, some without TACRO or m-TOR without any added trigger to KTx itself. Biopsy available in 12/15. Plasmapheresis got no response or only partial hematologic remission. Then 12 cases received ECU and got: 7 complete, 4 partial remission and 1 Nephrectomy. ECU was withdrawn after 2 months in 11 cases. One recurrence after 1 year without ECU. No any SAEs. We are unable to identify risk-factors from Genetic, immunosuppressive or type of graft donor.

7 *late cases* (> 1 year after KTx) with infective triggers, all of them received plasmaferesis with partial remission, and ECU, got 5 total remission.

CONCLUSIONS: We have defined different clinical presentation and the therapeutic approach in a real life large TMA clinical series. Preemptive use of ECU allow successful KTX with graft coming from different donors ECU present good efficacy and safety profile in TMA novo. More multicenter study are needed to stablish response factors and optimum therapy.

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