

# KSN 2016 Abstract Submission

## *Clinical Nephrology*

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### **IgA nephropathy Associated with Complement-mediated Thrombotic Microangiopathy Treated Successfully by Steroid therapy**

Ha Nee Jang\*<sup>1</sup>, Tae Won Lee<sup>1</sup>, Min Jeong Kim<sup>1</sup>, Yire Kim<sup>1</sup>, Kyunglan Moon<sup>1</sup>, Hyun Seop Cho<sup>1,2</sup>, Se-Ho Chang<sup>1,2</sup>, Eunjin Bae<sup>3</sup>, Dong Jun Park<sup>1,2,3</sup>, Hyun-Jung Kim<sup>1,2</sup>

<sup>1</sup>Department of Internal Medicine, Gyeongsang National University School of Medicine and Gyeongsang National University Hospital, <sup>2</sup>Institute of Health Sciences, Gyeongsang National University, Jinju, <sup>3</sup>Department of Internal Medicine, Gyeongsang National University School of Medicine and Gyeongsang National University Changwon Hospital, Changwon, Korea, Republic Of

**Background:** The primary thrombotic microangiopathy (TMA) syndrome includes thrombotic thrombocytopenic purpura (TTP), hemolytic uremic syndrome (HUS), complement-mediated TMA, drug-induced TMA and metabolism- or coagulation-mediated TMA by underlying cause. This systemic disorder is characterized by nonimmune microangiopathic hemolytic anemia (MAHA) and thrombocytopenia. Complement-mediated TMA can be caused by hereditary deficiency of regulatory proteins or acquired complement autoantibodies. IgA nephropathy (IgAN) that is the most common glomerulonephritis has been rarely reported with HUS, and the relationship between them is still unknown. We experienced the patient with complement-mediated TMA with IgAN and treated her successfully by steroid therapy.

**Methods:** A 72-year-old woman was referred to our hospital due to azotemia aggravation, dyspepsia and gross hematuria. She denied taking any medications. Her laboratory findings revealed MAHA with elevated reticulocyte count, severe thrombocytopenia, high lactate dehydrogenase (LDH) and low haptoglobin. Her bone marrow examination revealed normocellular marrow with trilineage hematopoiesis. Her complement levels were decreased without vitamin B12 deficiency or ADAMTS 13 activity defect. Her renal pathologic findings were compatible with IgAN. But, the presenting clinical features were compatible to the characteristics of complement-associated TMA.

**Results:** She was treated with oral methylprednisolone 1 mg/kg daily. Her abnormal renal and hematologic laboratory findings were restored to normal after 8 weeks.

**Conclusion:** We treated her successfully without plasma exchange even though she presented complement-associated TMA with IgAN.

**Keywords:** complement-mediated TMA, hemolytic uremic syndrome, IgA nephropathy, methylprednisolone, nephrotic syndrome, thrombotic microangiopathy, thrombotic thrombocytopenic purpura, TMA