RITUXIMAB AS A SECOND LINE TREATMENT IN TWO CASES OF AUTOIMMUNE ANTI-NMDAR POST-HERPES SIMPLEX ENCEPHALITIS

David Torres-Fernández¹, Paula Carrascosa García², Lidia Oviedo Melgares¹, Maria Concepción Miranda Herrero², Daniel Blázquez Gamero¹, Elena Rincón López², Luis Manuel Prieto Tato¹, Mar Santos Sebastián², Pablo Rojo Conejo¹, Estíbaliz Barredo Valderrama², Cinta Moraleda Redecilla¹, Juan José Carballo Belloso², Cristina Epalza¹, Elisa Fernández Cooke¹.

ESP18-0502

¹ Paediatric Infectious Diseases Unit, Hospital Universitario 12 de Octubre (Madrid, Spain)

² Paediatric Infectious Diseases Unit, Hospital General Universitario Gregorio Marañón (Madrid, Spain)

Hospital Universitario
12 de Octubre

Hospital General Universitario
Gregorio Marañón

36TH ANNUAL MEETING OF THE
EUROPEAN SOCIETY FOR
PAEDIATRIC INFECTIOUS DISEASES

INTRODUCTION Herpes Simplex Virus (HSV) is the first cause of severe encephalitis in children. Anti-NMDAr Encephalitis is a rare complication of this condition.

CASE REPORT

We present 2 boys, **12** (patient 1) and **3 months old** (patient 2) respectively that presented to A&E with **fever, decreased consciousness and complex partial seizures**.

MRI showed **temporal lobe** injuries compatible with herpetic meningoencephalitis and **HSV-1 PCR in CSF** was positive

They had an initial satisfactory evolution on acyclovir and antiepileptic drugs.

After 14 and 25 days of treatment respectively, both presented **sudden deterioration**, with new **seizures**, loss of developmental milestones and appearance of **choreoathetotic** movements.

Repeat MRI showed progression of previous injuries with **necrohaemorrhagic encephalitis**

Autoimmune encephalitis was suspected, and then confirmed by presence of antibodies against **brain glutamate NMDA receptor in CSF and blood serum**.

Both patients received **methylprednisolone** during 5 days, 2 doses of **Immunoglobulins**, and 5 cycles of **plasmafiltration**. No clinical improvement was observed.

RITUXIMAB was started with 4 weekly doses, showing **neurological improvement** and **decrease in chorea** after the second dose.

7 months after treatment, patient 1 showed increasing aggressiveness and sleep disturbances as IgG anti-NMDAr rose in blood serum. Suspecting a relapse, a new cycle of Rituximab was administered with subsequent improvement and negativity of antibodies.

CONCLUSION

- **Autoimmune encephalitis** should be suspected if clinical worsening is observed during evolution of herpetic encephalitis **and anti-NMDAr antibodies in CSF and blood serum performed**.
- Treatment with **Rituximab** be considered early as **second line** treatment.