Material and methods We describe the case of a child affected by TRAPS and its pharmacotherapeutic management. Treatment options included oral glucocorticoids and biologic agents (etanercept, anakinra). Medical and pharmaceutical records were reviewed, and a bibliographic research was made to establish the state of the art treatment of TRAPS. UpToDate, Pubmed and the Cochrane Library were consulted, finding little information on this very rare medical condition.

Results Our patient was a 7 year old boy who presented with recurrent febrile episodes, accompanied by abdominal pain and periorbital eczema. There was no infectious focus. Laboratory data showed elevated inflammatory markers. The rheumatologist suspected an autoimmune syndrome rather than an autoinflammatory disease. Lack of autoantibodies and a genetic diagnosis confirmed TRAPS.

Initial treatment was oral prednisone, with a response similar to NSAIDs. Due to persistence of symptomatology, the clinician indicated etanercept, which achieved a partial response but had to be interrupted because of respiratory related sepsis. Afterwards, this biologic was reintroduced with low doses of prednisone. Over the following months the patient relapsed, and anakinra was prescribed instead of etanercept. Anakinra treatment showed satisfactory results, achieving symptomatology control and normalisation of laboratory parameters with no remarkable safety concerns.

Conclusion and relevance We have presented the case of a patient refractory to anti-TNF treatment who experienced dramatic improvement with the recombinant human IL-1 receptor antagonist anakinra. There are only a few cases published on this subject, and our experience supports the evidence that anakinra can be considered a first-line treatment for TRAPS, which is a rare genetic condition confirmed TRAPS.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

**4CPS-131**

**EFFECTIVENESS OF NUSIINERSEN IN PAEDIATRIC PATIENTS SMA1 AND SMA2**

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No conflict of interest.

**Background and importance** Nusinersen is an innovative drug given by intrathecal injection and used to treat 5q-spinal muscular atrophy (SMA), a severe neuromuscular disorder due to a defect in the survival motor neuron 1 (SMN1) gene. This antisense oligonucleotide drug modifies RNA splicing of the SMN2 gene, thus increasing the production of full length SMN protein. The first dose, given as soon as possible after the diagnosis, should be followed by three more doses after 2, 4 and 9 (L1, L2, L3, L4) weeks and one dose every 4 months (M1, M2, M3...) thereafter.

**Aim and objectives** This study aims to describe the efficacy of nusinersen in terms of improvements in motor function in paediatric patients with SMA1 and SMA2.

**Material and methods** From February 2018, we collected data from 8 patients, 3 with SMA 1 and 5 with SMA 2, using specific neuromuscular functional tests: CHOP-INTEND, HINE and HFMSE. Results are expressed as points of increase (p) in motor function scores from baseline (or from the first score recorded in our centre*) to the score obtained at the time of the last injection for each patient.

**SMA1 patients:**
- 2 months old at the time of first injection (TFI): CHOP-INTEND 8/64 to +38p (M2); HINE 0/26 to +5p (M2).
- 3.3 years old TFI*: CHOP-INTEND 18/64 (M2) to +16p (M6); HINE 2/26, stable at M6.
- 5.6 years old TFI*: CHOP-INTEND 1/64 (M2) to –1p (M4); HINE 0/26 (M2) to +1p (M4), then suspended for absence of efficacy.

**SMA2 patients:**
- 1.2 years old TFI: CHOP-INTEND 59/64 to –1p (M1).
- 3.4 years old TFI: CHOP-INTEND 41/64 to +8 (M1), +14p (M3); HFMSE 8/66 to stable at M1 +4p (M3).
- 4.6 years old TFI: CHOP-INTEND 55/64 to +6p (M1) +7 (M2); HFMSE 22/66 to +3p (M1), +3p (M3).
- 8.5 years old TFI: CHOP-INTEND 42/64 to +5p (M1); HFMSE 17/66 to +10p (M1).
- 11.5 years old TFI: CHOP-INTEND 37/64 to +2p (M1); HFMSE 8/66 stable at M1.

**Conclusion and relevance** Our results showed an average increase of 4 points for CHOP-INTEND and 3.75 points for HFMSE in SMA2 patients, after 6 months (M1) of treatment. For SMA1 patients, it was not possible to evaluate the average trend for CHOP-INTEND and HINE scores after 6 months of treatment because two patients started nusinersen in other hospitals (motor scores at L1–M1 not available). A longer follow-up and data from other parameters, such as swallowing and respiratory function, are important to better understand the overall efficacy of nusinersen.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

**4CPS-132**

**INDIRECT TREATMENT COMPARISON OF ANTI-CALCITONIN GENE RELATED PEPTIDE PATHWAY ANTIBODIES IN CHRONIC MIGRAINE**

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No conflict of interest.

**Background and importance** Erenumab, fremanezumab, galcanezumab and eptinezumab are monoclonal antibodies targeting the calcitonin gene related peptide pathway (anti-CGRP), used as preventive treatment in chronic migraine (CM).

**Aim and objectives** To evaluate whether anti-CGRP drugs are equivalent therapeutic alternatives (ETA) in CM through an adjusted indirect treatment comparison (ITC).

**Material and methods** A bibliographic search of randomised clinical trials (RCTs) in Pubmed was performed (20 May 2019). Inclusion criteria: phase II/III RCTs of anti-CGPR with similar populations, follow-up duration and comparator treatments. CM was defined as ≥15 headache days/month, of which ≥8 were migraine days (event duration ≥4 hours). Exclusion criteria: RCTs with different clinical CM context and other CM definitions. Efficacy end point was ≥50% reduction in migraine days/month (measured from the beginning of treatment to 12 weeks). An ITC was developed using adjusted indirect treatment comparison.