Background and importance

There are only a few cases published about this subject, so our experience can support the evidence that anakinra can be considered a first line treatment for TRAPS, due to its efficacy and lack of adverse reactions.

Objectives

1. Describe the singular case of a child affected by a tumor necrosis factor receptor-1-associated syndrome (TRAPS)
2. Analyze its phamacotherapeutical management, focusing on biologic agents, such as etanercept and anakinra.

Patients and methods

- Medical and pharmaceutical records review
- Bibliographic research (UpToDate, Pubmed, The Cochrane Library)

Results

- SUBJECT: 7 year old boy
- SYMPTOMATOLOGY: recurrent febrile episodes, abdominal pain and periorbital eczema
- CLINICAL FINDINGS: No infectious focus
- LABORATORY DATA: Elevated inflammatory markers like C Reactin Protein (CRP) and erythrocyte sedimentation rate
- DIAGNOSIS: Lack of autoantibodies and genetic diagnosis confirmed TRAPS

- TREATMENT:
  - NSAIDS (low response)
  - PREDNISONE at medium doses (similar efficacy as NSAIDS)
  - ETANERCEPT (0.8 mg/kg/week) with partial response but interrupted because of respiratory related sepsis
  - Afterwards, etanercept reintroduced with low doses of prednisone, due to new flares
  - Due to relapse, ANAKINRA (1mg/kg/day) was introduced, instead of etanercept

Anakinra showed satisfactory results, achieving symptomatology control, normalization of laboratory parameters with no remarkable safety concerns.

Conclusion and relevance

Due to our experience, in pediatric patients affected by refractory TRAPS, biologic anakinra can be considered a safe and effective treatment.