Adalimumab in the Treatment of Refractory Non-infectious Scleritis: 18-Month Outcomes

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1. Purpose

Adalimumab (ADA), a tumour necrosis alpha (TNF-alpha) inhibitor, has become a globally well-recognised treatment for refractory uveitis. However, its use in the treatment of refractory scleritis remains limited. Since scleritis is a rare disease [1], there are no large-scale randomised controlled trials evaluating treatment efficacy [2, 3].

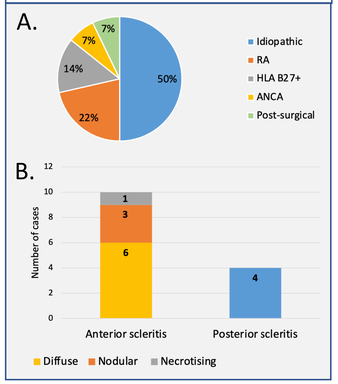
Evidence generated from a recent case series provided an argument for expanding the use of adalimumab to patients with refractory non-infectious scleritis [4]. Long-term outcomes are still underreported in this cohort of patients which makes conclusions on its overall efficacy challenging. Hence, we aim to report 18-month outcomes of patients with non-infectious, refractory scleritis treated with adalimumab at our tertiary referral centre.

2. Methods

- Hospital wide pharmacy search (Sept 2014 – Oct 2021)
- Retrospective study
- Inclusion criteria: adults established on ADA for at least 6 months
- 14 cases included

Study outcomes:
- Number and rate of disease reactivation on adalimumab.
- Ability to taper daily prednisolone dose to ≤5mg.
- Presence of any adverse events on adalimumab.
- Reasons for discontinuation.

Fig 1. Aetiological (A) and anatomical diagnoses (B) of our patients.

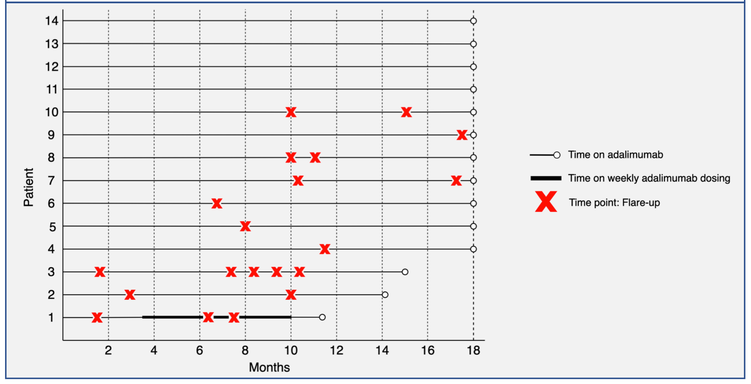


Abbreviations: Rheumatoid arthritis (RA), Human leukocyte antigen (HLA), anti-neutrophil cytoplasmic antibody (ANCA)

3. Results

- Patients' background characteristics are presented in Figure 1.
- At 18 months, 11 patients (**79%**) **continued ADA therapy.**
  3 patients discontinued due to:
  - Primary ineffectiveness (n=1, 7%)
  - Secondary ineffectiveness due to developing anti-ADA antibodies (n=2, 14%)
- At 18 months, **90.9% of patients were on ≤5mg of daily prednisolone**
  - Increase from 28.6% on initiation (P < 0.004, Fisher exact test).

Fig 2. Graph representing flare-ups on ADA.



- Rate of disease reactivation was **1.01 flare-ups/patient-year.**
  - 4 patients did not experience any episodes of disease reactivation (Figure 2).
- 4 patients reported side effects: pain on injecting adalimumab, a single episode of bleeding gums, headache and nausea, peripheral neuropathy and infection.

4. Conclusions

- Overall, **good response to adalimumab in the majority of patients with refractory scleritis after 18 months of treatment**.
- 90.9% of patients was on ≤5mg of daily prednisolone at 18 months.
- Development of anti-ADA antibodies stopped two patients (14%) from continuing long-term therapy.
- More multi-centre data needed to further support ADA consideration for scleritis patients.

References

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