Anti-VEGF Therapy: it's role in the Management of Inflammatory Choroidal Neovascularisation

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Introduction:

Inflammatory choroidal neovascular membrane (iCNV) is a sight-threatening complication of various uveitic conditions. Anti-VEGF therapy has emerged as a potential treatment option, but evidence on its efficacy in diverse inflammatory eye conditions remains limited.

Aims:

To evaluate the efficacy of intravitreal anti-VEGF therapy in the management of inflammatory CNV across different uveitic conditions, with specific focus on **visual outcomes**, **anatomical changes**, and **recurrence rates.**

Methods:

Study Design	Retrospective study at Bristol Eye Hospital (Aug 2009 - Nov 2021)
Inclusion criteria	Patients with uveitis diagnosis, angiographic confirmation of CNV, and minimum 6-month follow-up
Sample	25 eyes of 23 patients
Anti-VEGF agents used	Aflibercept (40%), Bevacizumab (36%), Ranibizumab (24%)
Treatment Protocols	Loading dose (40%) vs. PRN treatment (60%)
Outcomes measured	Visual Acuity (VA) in ETDRS letters Central Retinal Thickness (CRT) CNV Activity and Recurrence rate
Analysis	Freidman's Test (non-parametric) for statistical significance (p<0.05)

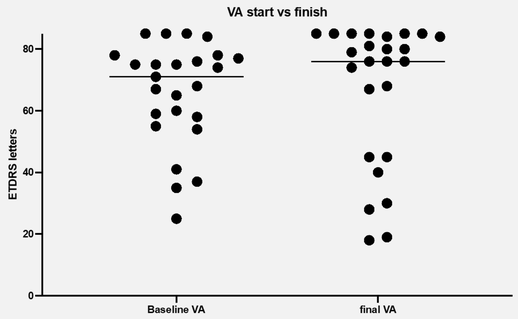
Results:

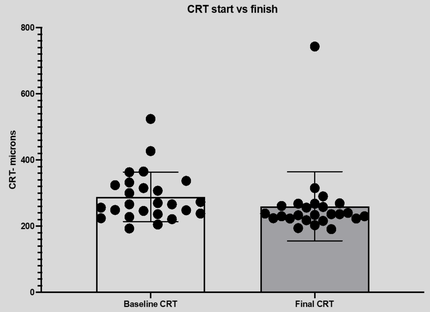
1.Visual Acuity

Measured ETDRS letters from follow up clinics

Final Visit (median follow-up: 34 months):

- 84% maintained vision
- 40% gained ≥5 letters
- 32% lost ≥5 letters
- **Median VA: 76 letters (vs. 71 at baseline)**





2. Anatomical Changes

Central Retinal Thickness (CRT) was monitored, a key sign of inflammation.

There was significant reduction across timepoints (p=0.011)

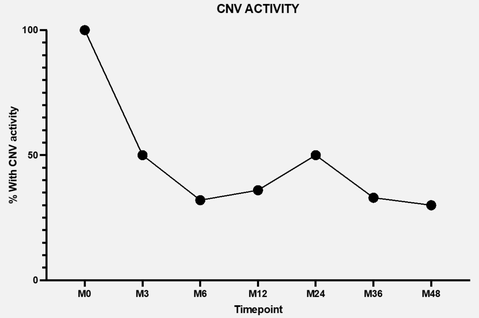
- Month 3: -29 ± 40.9 µm
- Month 6: -38 ± 54.3 µm
- Month 12: -35.4 ± 50.6 µm
- Final visit: -28.8 ± 79.5 µm (60% showed reduction)

3. CNV Activity

- 100% active at baseline → 28% active at final visit
- Median 5 injections (range: 1-30) over median 34 months follow-up

Recurrence Patterns:

- 28% had no recurrence after initial treatment
- 33% of PIC cases had no recurrence



Conclusions:

The study has shown that AntiVEGF therapy maintained or improved vision in 84% of cases, significantly reduced CRT across all timepoints, and reduced CNV activity from 100% to 28% at final follow up.

Both the loading dose and PRN regimen showed efficacy, and synergistic use of systemic immunosurpression may reduce recurrence rates, though not found to be statistically significant.

This study adds to the growing evidence supporting anti-VEGF as an effective treatment for inflammatory CNV across various uveitic conditions.

Acknowledgements:

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