LONG TERM VISUAL ACUITY OUTCOMES POST-IVT ENDOPHTHALMITIS

(Umair Arain, Craig Goldsmith, Kelly Evers, Harish Reddy, Muhammad Raja)



INTRODUCTION

Anti-VEGF intravitreal injections are the commonest ophthalmic procedure performed in the NHS UK. Current NICE UK approved indications for NHS use include Neovascular AMD, Macular edema due to Diabetes and Retinal vein occlusions and Myopic related choroidal neovascularization.

Endophthalmitis is one of the most serious complication post intravitreal injections leading to irreversible visual loss. In published literature the incidence of endophthalmitis after IVT injections can vary from 0.02 to 0.1%. As the incidence is quite low very few studies have been done evaluating the long term visual outcomes. Robust real world data is required to inform management strategy and patient choice for consent taking.

PURPOSE OF STUDY

To evaluate the long term (two years) visual outcomes post anti-VEGF injections.

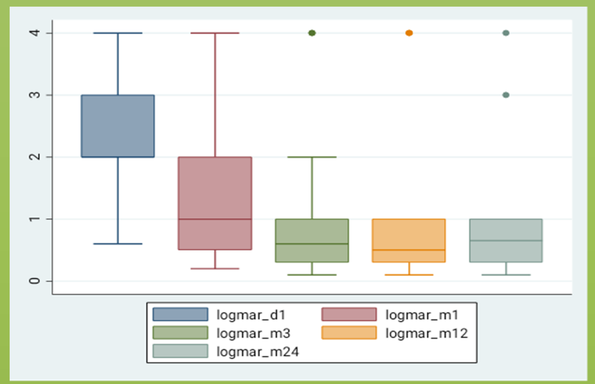
METHODS

Retrospective case note based review and analysis from January 2008 till July 2021. Data was extracted from the electronic healthcare database.

RESULTS

During the 13 year(2008-2021) period 27 patients were identified with presumed endophthamitis who underwent Vitreous tap and/or AC tap/inject.

Total of 27 Patients / 48,835 injections



VA(logMar)	Mean LogMar(SD)
DAY 1	2.4(1)
1 MONTH	1.4(1.2)
3 MONTHS	0.9(1)
1 YEAR	0.9(1)
2 YEAR	0.9(1)

Baseline Visual acuity at presentation with Post-op Endophthalmitis was 2.4 Log Mar, with pre-injection vision at 0.5 Log Mar, which increased to 0.9 Log Mar at 24 months follow-up. Overall, visual acuity decreased by 0.4 Log Mar (4 Snellen's lines).

DISCUSSION

The increasing use of anti-VEGF medication for retinal diseases has led to increased prevalence of post injection endophthalmitis. Incidence is 1 in 2000-3000 cases but can lead to severe vision loss. This retrospective study assessed long term visual acuity outcomes in patients with endophthalmitis.

The intravitreal antibiotic regimen used was vancomycin plus either amikacin or ceftazidime. 10 cases (59%) were Gram positive, Staph aureus being the most common causative organism. The median time period between injection and presentation was 4 days which is consistent with other studies. The median number of 10 injections was also comparable with literature.

Overall incidence rate (0.05%) and Long term visual acuity outcome results are comparable with national and international data. The data provides much needed evidence for consent taking to inform the treatment decision process and patient choice.