COVID-19 pandemic impact on patients with nAMD: Assessing clinical outcomes of patients who underwent 8 weekly anti-vegf treatment with no clinic review

#1049

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Introduction

Age Related Macular degeneration (AMD) is the leading cause of legal blindness in developed world, with estimated number of 288 million people living with the disease by 2040 worldwide.[1]

In the UK it is anticipated to affect 600,000 people, with 39,700 patients developing neovascular AMD(nAMD) each year.[2]

During the COVID-19 pandemic, in line with the UK Royal College of Ophthalmologists'(RCOphth) guidelines,[3] anti-vegf treatment regimens for nAMD were adjusted to 8 weekly Aflibercept injections with no clinic review.

This work audits our practice at a tertiary university hospital during the 2020 pandemic against our previously published data.[4]

Methods

Retrospective electronic data collection from Medisoft ophthalmology for patients with nAMD, who received Aflibercept over 5 months period from 01.03.2020 to 01.08.2020. Their BCVA, central Retinal thickness (CRT), and number of injections were collected, and compared with our previously published year one data of 225 treatment naïve eyes of 223 patients with nAMD, treated with 8 weekly Aflibercept with mean BCVA of 61 letters & mean CRT of 235 µm at month 5 of therapy.

Patients were included if they have active diagnosis of nAMD on Aflibercept during our study period. Exclusion criteria included patients on other anti-vegf agents.

Statistical analysis was done using SPSS version 24. P-value considered statistically significant when $P < 0.05$

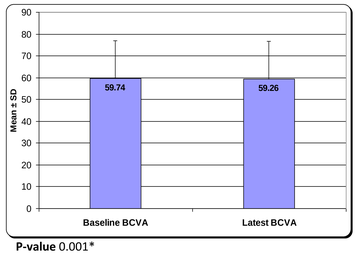
Results

Personal and clinical data

Personal data	No. (1427)	%
Gender:		
Male	540	37.8%
Female	887	62.2%
Age: (years)		
< 80	471	33.0%
80 - < 90	674	47.2%
≥ 90	282	19.8%
Mean ± SD	82.32 ± 8.49	
Clinical data	**No. (1427)**	**%**
Treatment type:		
On 8 weekly Aflibercept	1338	93.8%
On a loading dose of Aflibercept (4 weekly)	89	6.2%
Number of injections during study period:		
One	184	12.9%
Two	536	37.6%
Three	618	43.3%
More than three	89	6.2%

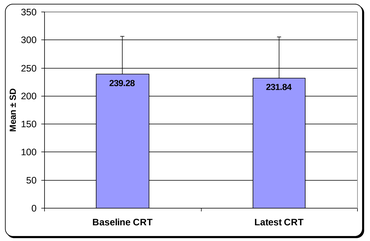
83 had 4 injections, 5 had 5 & one had 6 injections

Baseline and latest BCVA in EDTRS Letters of patients on 8 weekly Aflibercept injections



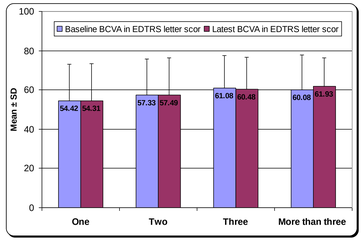
P-value 0.001*

Baseline and latest CRT in µm of patients on 8 weekly Aflibercept injections



P-value 0.001*

BCVA in EDTRS Letters with number of injections during study period



P-value 0.000*

Summary of the Results

The data was collected for 1778 eyes of 1427 patients who met our inclusion criteria and were included in the study. 1338 patients (93.8%) received 8 weekly injections, their mean BCVA ± SD was 59.7 ± 17.3 with CRT of 239.3 µm ± 67.2 SD at baseline and their latest BCVA ± SD was 59.3 ± 17.4, with CRT of 231.8 µm ± 73.8 SD. More than one third of them 618 (43.3%) received three injections during that period.

Conclusion

Reassuringly, during the COVID-19 pandemic, patients on a fixed 8 weekly Aflibercept pathway maintained their vision. Their mean BCVA & CRT were comparable to our pre-COVID audit outcomes with a treat and extend protocol.

RCOphth COVID guidelines allowed AMD patients to receive effective therapy whilst minimizing time in hospitals and permitted ophthalmologists to do other COVID related tasks.

Reference

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3.RCOphth. Management-of-Ophthalmology-Services-during-the-Covid-pandemic-280320.pdf [Online].

4.Almuhtaseb H, et al. One-year real-world outcomes in patients receiving fixed-dosing aflibercept for neovascular age-related macular degeneration. Eye (Lond) 2017;31(6)