Anti VEGF Revolution, Progress and Challenges

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Abstract

Introduction: The anti-VEGF revolution has transformed the management of retinal diseases, notably Age-related Macular Degeneration (AMD) and Diabetic Macular Edema (DME). Our study at the University Clinical Center of Kosovo aimed to evaluate the efficacy of Bevacuzimab, Faricimab, and Brolucizumab in these conditions while assessing the challenges faced in treatment.

Methods: We analyzed treatment records comprising Bevacuzimab injections annually for AMD and DME, alongside injections for Retinopathy of Prematurity (ROP). The study also included effectivity of the new injections, Faricimab and Brolucizumab, focusing on anatomical and functional outcomes and injection frequency.

Results: Our results indicate that the center administers approximately 3,000 Bevacuzimab injections annually for AMD and DME, demonstrating its critical role in preserving vision in these populations. Additionally, 20 injections were provided for retinopathy of prematurity (ROP), highlighting the expanding application of anti-VEGF therapy. While the effectiveness in reducing retinal edema and improving visual acuity is evident Bevacuzimab continued to demonstrate significant efficacy in managing AMD and DME. However, Faricimab and Brolucizumab showed promising results, with improved patient outcomes and reduced injection intervals, indicating a potential shift in standard treatment practices.

Conclusion: While Bevacuzimab remains a cornerstone in the treatment of retinal diseases, the advent of novel anti-VEGF agents like Faricimab and Brolucizumab represents a potential revolution in retinal therapy, though challenges in accessibility and cost persist. Future studies should focus on long-term outcomes and broader applications of these newer treatments.