

Use of intravitreal dexamethasone implant associated or not with anti-VEGF therapy in diabetic macular edema: efficacy and safety

Uso de implante intravítreo de dexametasona associado ou não à terapia anti-VEGF no edema macular diabético: eficácia e segurança

Joice Rodrigues Rachid Amin^{*1}, Welton Gomes de Paula¹, Lucas Assis Costa²

ABSTRACT

Introduction: Diabetic macular edema (DME) is characterized by macular exudation and damage to retinal microvasculature. It is estimated that 30% of diabetic patients develop DME during the course of the disease. Currently, Anti-vascular endothelial growth factor therapy (Anti-VEGF) is first-line for DME; however, intravitreal dexamethasone implant has shown potential benefits. **Methods:** PubMed, Cochrane, and Embase were searched using the keywords "Diabetic Macular Edema," "Therapy," and "Diabetic Retinopathy" to evaluate the efficacy and safety of intravitreal dexamethasone implant compared to anti-VEGF injection and dual therapy in DME. **Results:** A total of 445 studies were identified, screened by title, abstract and full-text (n=5). **Discussion:** Patients treated with intravitreal dexamethasone implant did not show significant improvement in best-corrected visual acuity (BCVA) compared to those treated with Ranibizumab over 4 months. However, there was a significant difference in the reduction in mean central foveal thickness (CFT) and mean central macular thickness (CMT) in the dexamethasone intravitreal implant group compared to the anti-VEGF group in two studies. In another clinical trial, the proportion of BCVA improvement after 2 years was similar between only intravitreal dexamethasone implant-treated patients and only anti-VEGF-treated patients, but the first group required significantly fewer treatments over a 5-year period. Moreover, intravitreal dexamethasone implant use reduced the number of intravitreal injections after 12 months compared to Ranibizumab and Afibercept. Finally, patients receiving dual therapy experienced BCVA improvement and significant CFT reduction after 12 months compared to those treated with Ranibizumab alone. Adverse effects of intravitreal dexamethasone implant treatment included increased intraocular pressure (IOP) and cataracts. **Conclusion:** Intravitreal dexamethasone implant use for DME treatment, either as monotherapy or dual therapy, demonstrated efficacy in reducing CFT compared to isolated anti-VEGF therapy. Despite local side effects, intravitreal dexamethasone implant showed safety and reduced injection frequency, potentially enhancing DME treatment adherence.

Keywords: Diabetic macular edema; Therapy; Diabetic retinopathy.

¹ Faculdade de Minas (FAMINAS-BH), Belo Horizonte, MG, Brazil.

² Instituto de Olhos Ciências Médicas de Minas Gerais (IOCM), Belo Horizonte, MG, Brazil.

Associate Editor Responsible:

Fernanda Belga Ottoni Porto
INRET Clínica e Centro de Pesquisa.
Belo Horizonte, MG, Brazil.

Corresponding author:

Joice Rodrigues Rachid Amin
Faculdade de Minas (FAMINAS-BH),
Minas Gerais MG, Brazil.
Email: joicerachid@hotmail.com

Supporting sources:

None.

Conflict of interest:

None.

Received on: August 29, 2025.

Approved on: September 21, 2025.

Publication Date: March 17, 2026.

DOI: 10.5935/2238-3182.2025e35125-en

RESUMO

Introdução: O edema macular diabético (EMD) é caracterizado por exsudação na mácula e danos na microvasculatura retiniana. Estima-se que 30% dos pacientes diabéticos evoluem com EMD. Atualmente, a terapia antifator de crescimento endotelial vascular (Anti-VEGF) é primeira linha, porém o implante intravítreo de dexametasona tem mostrado potenciais benefícios. **Métodos:** Buscou-se no PubMed, Cochrane e Embase os descritores “Diabetic Macular Edema”; “Therapy”; “Diabetic Retinopathy”, com o objetivo de avaliar a eficácia e segurança da dexametasona comparada à injeção de anti-VEGF e à terapia dupla no EMD. **Resultados:** Foram selecionados 445 estudos, triados pelo título, resumo e leitura completa (n=5). **Discussão:** Pacientes tratados com dexametasona não apresentaram melhora significativa na acuidade visual melhor corrigida (BCVA) em comparação com os tratados com Ranibizumab em 4 meses. Entretanto, houve diferença significativa na redução da espessura foveal central (CFT) média e na espessura macular central (CMT) média no grupo de dexametasona em relação ao grupo de anti-VEGF em dois estudos. Em outro ensaio clínico, a proporção de melhora no BCVA após 2 anos foi similar entre pacientes tratados somente com dexametasona e somente com anti-VEGF, porém o primeiro grupo teve significativamente menos tratamentos durante o período de 5 anos. Ainda, o uso de dexametasona reduziu o número de injeções intravítreas após 12 meses em comparação com Ranibizumab e Aflibercept. Por fim, pacientes em terapia dupla obtiveram melhora de BCVA e redução significativa da CFT após 12 meses, em comparação com o uso isolado de Ranibizumab. Os efeitos adversos do tratamento com dexametasona foram aumento da pressão intraocular (PIO) e catarata. **Conclusão:** O uso de dexametasona para tratamento de EMD, em monoterapia ou terapia dupla, apresentou eficácia na redução da CFT em relação ao anti-VEGF isolado. Apesar dos efeitos colaterais locais, o implante intravítreo de dexametasona demonstrou segurança e redução na necessidade de injeções, melhorando a adesão ao tratamento.

Palavras-chave: Edema macular diabético; Terapia; Retinopatia diabética.

INTRODUCTION

Diabetic macular edema (DME), a serious ocular complication that can occur at any stage of diabetic retinopathy (DR) and is one of the most common causes of visual loss in patients with diabetes mellitus¹. Studies indicate that approximately 1 in every 14 people with diabetes presents with some degree of DME¹. With diabetes expected to double in prevalence over the next 20 years, DME could become a leading cause of vision loss².

DME often develops insidiously and presents initial symptoms such as central vision blurring¹. The disease is

characterized by the deterioration of the inner blood-retinal barrier and the accumulation of fluid in the central region of the retina, resulting in edema². The pathophysiology of DME is not fully understood; however, vascular endothelial growth factor (VEGF) is considered crucial in its pathogenesis³. This factor is significantly elevated in patients with DME, enhancing vascular permeability and exacerbating diffuse capillary leakage and focal edema resulting from clustered microaneurysms¹.

Currently, intravitreal injection therapy with VEGF inhibitors has established itself as the first-line treatment for

patients with DME. However, the need for frequent injections and resistance to Anti-vascular endothelial growth factor therapy (Anti-VEGF) remain significant challenges⁴. In this context, intravitreal dexamethasone implantation has gained prominence in the management of DME due to its potential therapeutic effects, which include modulation of various inflammatory pathways, including VEGF blockade^{2,3,5}.

Ozurdex[®] is a biodegradable intravitreal implant containing 0.7mg of dexamethasone, a synthetic corticosteroid with potent anti-inflammatory and antiangiogenic properties, designed to provide sustained drug release for up to six months⁶. It is indicated for the management of macular edema secondary to diabetic retinopathy, retinal vein occlusion, and non-infectious uveitis affecting the posterior segment of the eye⁴. Its mechanism of action involves the inhibition of pro-inflammatory cytokines such as IL-6 and TNF- α , the reduction of vascular permeability mediated by VEGF, and the stabilization of the inner blood-retinal barrier, ultimately decreasing macular edema⁶. The implant is composed of a poly(lactic-co-glycolic acid) polymer, which gradually degrades to ensure controlled drug delivery⁶. The efficacy and safety of Ozurdex have been demonstrated in multicenter randomized trials, such as the MEAD study, which reported significant improvements in visual acuity and reductions in CRT in patients with DME refractory to conventional therapy⁷.

METHODS

This systematic review was performed according to the Cochrane Collaboration and the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) statement recommendations⁸. As this study is a review of previously published data, approval from an ethics committee was not required.

Studies were only included if they met the inclusion criteria: (1) clinical trials; (2) analysis of pharmacological therapy for diabetic macular edema, including dexamethasone implant and anti-angiogenic agents, such as ranibizumab, aflibercept and bevacizumab; (3) efficacy and presence of adverse events. Secondary outcomes involved evaluating the efficacy and safety of Ozurdex in comparison with anti-VEGF monotherapy and with combination therapy using both Ozurdex and anti-VEGF agents in the management of DME. There was no restriction on language or time of follow-up. Studies published within the last 5 years were included, while those not meeting the inclusion criteria or lacking relevant outcomes were excluded.

PubMed, Cochrane Database of Systematic Reviews and Embase were systematically searched. The search utilized descriptors and associated terms such as "Diabetic Macular Edema", "Therapy" and "Diabetic Retinopathy", combined with Boolean operators.

Screening was performed by applying inclusion criteria, and studies were selected by title, abstract and full reading, respectively. The Rayyan website was used for screening and studies organisation, guaranteeing no accounting or

selection errors. The process was performed by two authors, in blinded mode, and discrepancies in any of the selection phases were verified by a third author.

RESULTS

STUDY SELECTION AND CHARACTERISTICS

The search yielded 754 articles, and after duplicates were removed and inclusion criteria were applied, 12 articles were selected for complete evaluation. 5 studies were included, comprising 381 eyes. The screening flow diagram with further details can be seen on Figure 1.

Most of the included studies were performed in India, involved a total of 180 eyes (47.2%) across two studies (40%)^{2,4}. One particular study from India evaluated 140 eyes (36.7%), which represents most of patients². Additionally, all studies conducted a detailed ophthalmologic examination, covering parameters such as best-corrected visual acuity (BCVA) and intraocular pressure (IOP). In terms of treatment, the majority utilized ranibizumab^{2,4,9}, while bevacizumab was used in two studies^{4,10}, and aflibercept in one of them⁹, all in comparison to dexamethasone implant. The included studies main characteristics are represented in Table 1.

This systematic review, encompassing 381 eyes from 5 studies, aimed to evaluate the efficacy and safety of Intravitreal dexamethasone implant versus anti-VEGF injections and dual therapy for DME. The key findings were as follows: (i) the Intravitreal dexamethasone implant group showed a significant reduction in mean Central foveal thickness (CFT) compared to the anti-VEGF group; (ii) patients receiving dual therapy experienced improved BCVA; and (iii) adverse effects associated with Intravitreal dexamethasone implant treatment included increased IOP and cataracts.

STATISTICAL DIFFERENCES IN RESULTS

Across the reviewed trials, four studies reported statistically significant differences in central retinal thickness (CRT) between treatment groups, whereas only two demonstrated significant differences in best-corrected visual acuity. Specifically, Kaya et al. (2021)³ observed improvements in both BCVA ($p < 0.001$) and CFT reduction ($p = 0.001$) with dual therapy versus Ranibizumab alone. Mishra et al. (2021)² and the CiDME study found no significant BCVA change but a greater central macular thickness (CMT) reduction with dexamethasone implant ($p < 0.0001$ and $p = 0.02$, respectively) compared to anti-VEGF. The BEVORDEX trial reported no significant BCVA difference ($p = 0.38$) between dexamethasone and anti-VEGF, while the INVICTUS study did not assess thickness or acuity differences but confirmed a significant reduction in injection frequency ($p < 0.0001$).

DISCUSSION

EFFECTIVENESS AND SAFETY

The treatment of DME with intravitreal dexamethasone implant 0.7mg (DEX) was approved after the MEAD study. In

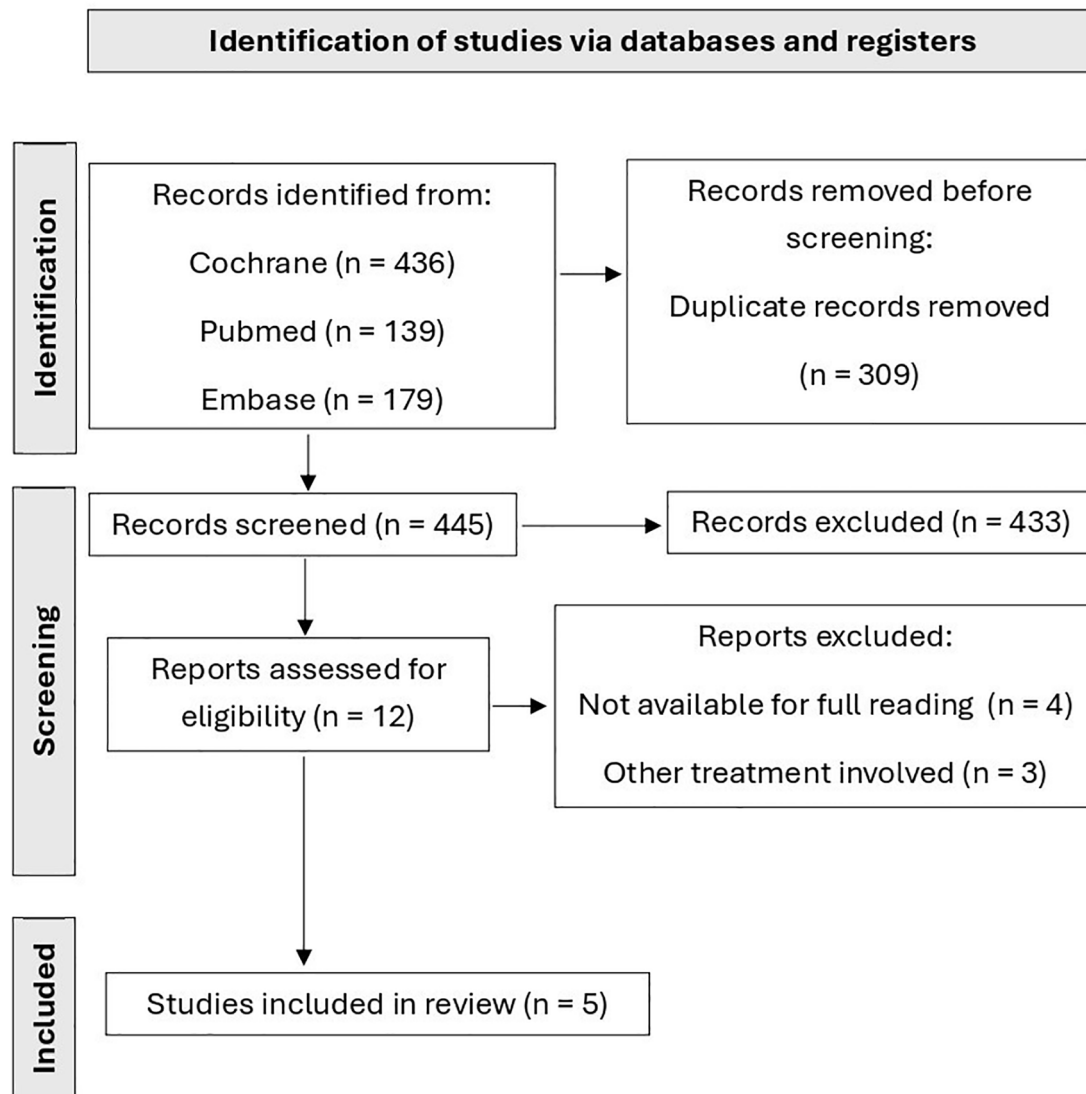


Figure 1. Screening applying PRISMA 2020 diagram for this systematic review. PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers Only. From: Page et al. (2021)⁸.

this study, patients were randomized to 1 of 2 doses of DEX (0.7mg or 0.35mg), or to sham procedure. After 3 years of treatment, there was a significant improvement in mean BCVA ($p=0.024$) and mean CRT ($p<0.001$) in DEX group, comparing to sham group. Adverse events reported were cataract-related in 70.3% of patients in the previously treated DEX subgroup, but the vision acuity was restored with cataract surgery⁷. In the same way, in Kaya et al. (2021)³ trial, patients in dual therapy (34 eyes) experienced BCVA improvement ($p<0.001$) and significant CFT reduction ($p=0.001$) after 12 months, compared to those receiving Ranibizumab alone (34 eyes)³.

Otherwise, in Mishra et al. (2021)² study, patients diagnosed with non-proliferative DR with macular edema treated with intravitreal dexamethasone implant (n=70) did not show significant improvement in BCVA compared to those treated with Ranibizumab (n=70) over 4 months. However,

mean CMT reduction was statistically greater with intravitreal dexamethasone implant over Ranibizumab ($p<0.0001$).² Besides, the CiDME study conducted with DME patients (n=38) showed that the dexamethasone implant group (20 eyes) had a higher reduction in mean CFT ($p=0.02$) after 3 months, compared to anti-VEGF group (20 eyes)⁴.

Similarly, in the BEVORDEX trial, the proportion of BCVA improvement after 2 years was similar between patients treated with only dexamethasone implant (n=46) and with only anti-VEGF (n=42), which was not significant ($p=0.38$). In spite of this, the dexamethasone implant group required significantly fewer treatments over the 5-year period ($p<0.05$)¹⁰. Also the INVICTUS study showed that dexamethasone implant use (n=21) reduced the number of intravitreal injections after 12 months ($p<0.0001$) compared to Ranibizumab (n=19) and Aflibercept (n=20)⁹. At last, in Kaya et al. (2021)³ trial, patients in dual therapy (34

Table 1. Selected studies for analysis in this systematic review.

Author/ year	Type of study and time of follow-up	Country and number of eyes	Main intervention	Ophthalmologic examination	Adverse effects	Main results
Comet (2019)⁹	Prospective randomized study; 6 months follow-up	France (n=60)	Intravitreal injections of ranibizumab (0.5 mg), afibercept (2.0 mg), and dexamethasone implant (0.7 mg)	Spectral-domain optical coherence tomography, ETDRS letters, CRT and BCVA.	No severe ocular adverse events (endophthalmitis, retinal detachment, non-controlled IOP) were reported during the follow-up.	Comparable efficacy at 6 months on visual acuity change or central macular thickness with good safety and with a lower injection number in DXI group.
Cornish (2023)¹⁰	Retrospective study; 5 years follow-up	Australia (n=73)	Intravitreal dexamethasone (DEX-) implant or bevacizumab over 2 year	LogMAR, Snellen charts and expressed as LogMAR letters, BCVA	Cataract and glaucoma were the adverse events observed in both groups	Eyes that were initially randomised to the DEX-implant group had significantly fewer treatments over the 5-year period than the bevacizumab treated eyes ($p<0.05$)
Kaya (2021)³	Prospective randomized study; 12 months follow-up	Turkey (n=68)	A combination of intravitreal ranibizumab and Dexamethasone implant (0.7mg); Intravitreal Ranibizumab (0.5mg)	A detailed ophthalmologic examination, including BCVA using ETDRS charts, slit-lamp biomicroscopy, tonometry and SD-OCT	Cataract and increased IOP were the ocular adverse events, but no systemic serious adverse event was observed.	Mean BCVA increased in the simultaneously double-protocol therapy group compared with the ranibizumab monotherapy group ($p<0.001$)
Mishra (2021)²	Prospective randomized and blinded trial; 4 months follow-up	India (n=140)	Intravitreal Ranibizumab (0.3mg in 0.05mL dose); Dexamethasone implant (0.7mg)	Macular edema confirmed on optical coherence tomography	The maximum IOP rise with IVD was found to be 16 mmHg in 2 patients (3.17%). IOP rise >10mmHg was observed in 22.22% patients;	Visual acuity gains between groups were not statistically significant, but CMT reduction was significant greater with IVD over IVR in the 2nd month ($p<0.0001$)
Sharma (2020)⁴	Prospective randomized study; 3 months follow-up	India (n=40)	Intravitreal anti-VEGF injection (bevacizumab 1.25mg or ranibizumab 0.5mg); Dexamethasone implant (0.7mg)	BCVA with snellens, near-vision acuity, IOP measured by AT, anterior segment examination and dilated fundus evaluation with 90D, and indirect ophthalmoscopy	IOP in group B was significantly higher, compared to group A ($p<0.001$)	There was no significant difference in mean BCVA between both groups ($p=0.27$); the mean CFT improved in dexamethasone implant group ($p=0.02$)

Legend: Anti-VEGF = Anti-vascular endothelial growth factor therapy; AT = Applanation tonometer; BCVA = Best-corrected visual acuity; CMT = Central macular thickness; CFT = Central foveal thickness; CRT = Central retinal thickness; IOP = Intraocular pressure; IVD = Intravitreal Dexamethasone; IVR = Intravitreal Ranibizumab.

eyes) experienced BCVA improvement ($p < 0.001$) and significant CFT reduction ($p = 0.001$) after 12 months, compared to those receiving Ranibizumab alone (34 eyes)³.

Regarding adverse effects, treatment with intravitreal dexamethasone implant resulted in increased IOP ($p < 0.001$)¹ and cataract development^{3,4}, although two studies diverge from this finding^{2,10}. No other significant adverse effects were observed, including infectious endophthalmitis, retinal detachment, and uncontrolled intraocular pressure^{2,9,10}.

COMPARISON WITH OTHER REVIEWS

In comparison to our findings, a systematic review and meta-analysis published in 2023, encompassing 21 studies and a total of 2,409 eyes, evaluated the efficacy and safety profiles of dexamethasone implant versus anti-VEGF therapy¹¹. The analysis revealed no significant differences between intravitreal dexamethasone implant and anti-VEGF therapies in patients with non-resistant DME. However, in patients with resistant DME treated with dexamethasone implant, there was a greater improvement in visual acuity. Furthermore, significant differences were observed between the dexamethasone implant group and the anti-VEGF group in terms of CRT reduction, both in patients with non-resistant DME and resistant DME¹¹. The studies showed no significant difference in IOP changes between Ozurdex and anti-VEGF, even in patients with resistant or non-resistant DME. Similarly, the occurrence of severe ocular adverse events, such as endophthalmitis, retinal detachment, and uncontrolled glaucoma, did not differ significantly between the groups¹¹.

On the other hand, the meta-analysis by Mehta et al. (2018)¹², published in 2018, across eight randomized controlled trials (703 participants, 817 eyes), assessed the effects of anti-VEGF agents plus intravitreal steroids versus monotherapy with macular laser, intravitreal steroids, or intravitreal anti-VEGF agents for managing DMO. In summary, combination therapy with anti-VEGF and intravitreal steroids did not produce a clinically meaningful difference in BCVA compared to anti-VEGF monotherapy at one year. Also, no significant difference was found in CMT¹². Comparable results were observed when combination therapy was compared with macular laser or steroid monotherapy, with no relevant change in BCVA or CMT over one year¹². Regarding safety, combination therapy was associated with a substantially higher risk of increased IOP and cataract formation compared with anti-VEGF alone¹².

The discrepancy between the results of our review and the two meta-analysis may be related to the different stages of

DME evaluated, considering that early stages tend to be more dependent on the antiangiogenic pathway, while later stages involve greater participation of inflammatory mechanisms, and degenerative stages show limited response to either approach. Our study demonstrated a significant benefit of the dexamethasone implant, particularly in improving CMT and, in some cases, visual acuity, in addition to reducing the number of required injections — findings consistent with a likely predominance of inflammation in the study population. Chi et al. (2023)¹¹ with a broader analysis, found no relevant difference in visual acuity in non-resistant DME, but showed an advantage for the implant in resistant cases, reinforcing the hypothesis of greater benefit in more advanced stages. In contrast, Mehta et al. (2018)¹² did not demonstrate a clinically meaningful gain with the combination of anti-VEGF and corticosteroid, suggesting that in early stages, or in cases already well controlled with antiangiogenic therapy, adding corticosteroid does not bring significant visual improvement but increases the risk of adverse events such as ocular hypertension and cataract.

STRENGTHS AND LIMITATIONS

This review adds to the existing literature by systematically examining the available evidence on DME treatment with intravitreal dexamethasone implant compared to anti-VEGF and dual therapy. However, several limitations should be acknowledged. Firstly, the included studies were limited to free available articles published, potentially introducing publication bias. Secondly, there was considerable variability in patient samples, study designs, ophthalmologic examination and follow-up, which precluded meta-analytic synthesis. Our comprehensive search across multiple databases (PubMed, Cochrane Database of Systematic Reviews and Embase), supplemented by reference searches, followed by rigorous screening and data extraction conducted by at least two reviewers, resulted in a substantial number of eligible, multivariate-adjusted studies involving a total sample size of 381 eyes, which represents a strength of this study.

CONCLUSION

Based on the review of studies, treatment of DME with intravitreal dexamethasone implant stands out as an effective and safe therapeutic option. This method has shown significant reduction in CMT and improvements in BCVA, particularly when compared to anti-VEGF therapies and combined therapy regimens. Despite being associated with adverse effects such as increased IOP and cataract

development, the benefits of the dexamethasone implant in managing DME are substantial, emphasizing its importance in the current ophthalmologic therapeutic arsenal.

AUTHOR'S CONTRIBUTIONS

We describe contributions to the papers using the taxonomy (CRediT) provide above:

Conceptualization, Methodology, Investigation, Data Curation, Resources, Visualization, Writing – Original Draft, Writing – Review & Editing: JRR Amin; *Conceptualization, Methodology, Investigation, Data Curation, Resources, Visualization, Writing – Original Draft, Writing – Review & Editing:* WG de Paula; *Conceptualization, Methodology, Software, Validation, Formal Analysis, Investigation, Data Curation, Resources, Project Administration, Funding Acquisition, Visualization, Supervision, Writing – Original Draft, Writing – Review & Editing:* LA Costa.

COPYRIGHT

Copyright© 2021 Amin et al. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original article is properly cited.

REFERENCES

- International Diabetes Federation (IDF). Clinical Practice Recommendations for Managing Diabetic Macular Edema. Brussels, Belgium: International Diabetes Federation; 2019.
- Mishra SK, Sinha S, Chauhan R, Kumar A. Intravitreal Dexamethasone Implant versus Intravitreal Ranibizumab Injection for Treatment of Non-Proliferative Diabetic Macular Edema: A Prospective, Randomized and Blinded Trial. *Curr Drug Deliv*. 2021;18(6):825-32.
- Kaya M, Kocak N, Ozturk T, Bolluk V, Ayhan Z, Kaynak S. Intravitreal ranibizumab and dexamethasone implant injections as primary treatment of diabetic macular edema: simultaneously double protocol. *Eye (Lond)*. 2021 Mar;35(3):777-85.
- Sharma A, Bellala K, Dongre P, Reddy P. Anti-VEGF versus dexamethasone implant (Ozurdex) for the management of Centre involved Diabetic Macular Edema (CiDME): a randomized study. *Int Ophthalmol*. 2020;40(1):67-72.
- Bakri SJ, Wolfe JD, Regillo CD, Flynn HW, Wyckoff CC. Evidence-Based Guidelines for Management of Diabetic Macular Edema. *J VitreoRetinal Dis*. 2019;3(3):145-52.
- Boyer DS, Yoon YH, Belfort Jr R, Bandello F, Maturi RK, Augustin AJ, et al. Three-year, randomized, sham-controlled trial of dexamethasone intravitreal implant in patients with diabetic macular edema. *Ophthalmology*. 2014;121(10):1904-14.
- Augustin AJ, Kuppermann BD, Lanzetta P, Loewenstein A, Li XY, Cui H, et al. Dexamethasone intravitreal implant in previously treated patients with diabetic macular edema: subgroup analysis of the MEAD study. *BMC Ophthalmol*. 2015 Oct 30;15:150.
- Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*. 2021 Mar 29;372:n71.
- Comet A, Gascon P, Ramtohul P, Donnadieu B, Denis D, Matonti F. INVICTUS: Intravitreal anti-VEGF and dexamethasone implant comparison for the treatment of diabetic macular edema: A 12 months follow-up study. *Eur J Ophthalmol*. 2021 Mar;31(2):754-8.
- Cornish EE, Teo KY, Gillies MC, Lim LL, Nguyen V, Wickremasinghe S, et al. Five-year outcomes of eyes initially enrolled in the 2-year BEVORDEX trial of bevacizumab or dexamethasone implants for diabetic macular oedema. *Br J Ophthalmol*. 2023 Jan;107(1):79-83.
- Chi SC, Kang YN, Huang YM. Efficacy and safety profile of intravitreal dexamethasone implant versus antivascular endothelial growth factor treatment in diabetic macular edema: a systematic review and meta-analysis. *Sci Rep*. 2023 May 8;13(1):7428.
- Mehta H, Hennings C, Gillies MC, Nguyen V, Campain A, Fraser-Bell S. Anti-vascular endothelial growth factor combined with intravitreal steroids for diabetic macular oedema. *Cochrane Database Syst Rev*. 2018 Apr 18;4(4):CD011599.



This is an open access article distributed under the terms of the Creative Commons Attribution License.