NICE Consultation

Macular oedema (diabetic) - dexamethasone intravitreal implant [ID653]

Cochrane

Magnifying reading aids for children and teenagers with low vision
Published: March 2015
Barker L, Thomas R, Rubin G, Dahlmann-Noor A
Authors' conclusions:
There is a lack of good quality evidence regarding the use of optical low vision aids in children and young people. As such, no implications for practice can be drawn. We believe future research should include functional outcome measures such as reading speed, accuracy and comprehension, as well as the effect of low vision aids on quality of life, in order to truly assess and compare the effect of these devices on a child's life and development.
Surgery to improve vision in people with nonarteritic anterior ischemic optic neuropathy (NAION)

Published: March 2015
Dickersin K, Li T

Authors’ conclusions:
The only eligible trial provided no evidence of a beneficial effect of optic nerve decompression surgery for NAION. Future research should focus on increasing our understanding of the etiology and prognosis of NAION. New treatment options should be examined in the context of randomized clinical trials.

Medical interventions for acanthamoeba keratitis

Published: February 2015
Alkharashi M, Lindsley K, Law H, Sikder S

This is a review of the evidence about medical treatments for Acanthamoeba keratitis which concludes that there is insufficient evidence to evaluate the relative effectiveness and safety of medical therapy for the treatment of AK. Results from the one included study yielded no difference with respect to outcomes reported between chlorhexidine and PHMB. However, the sample size was inadequate to detect clinically meaningful differences between the two groups as indicated by the wide confidence intervals of effect estimates.

Antiviral treatment and other therapeutic interventions for herpes simplex virus epithelial keratitis

Published: January 2015
Wilhelmus, K R

Authors’ conclusions:
Placebo-controlled studies of HSV epithelial keratitis are limited to superseded interventions. Trifluridine and acyclovir are more effective than idoxuridine or vidarabine and similar in therapeutic effectiveness. Brivudine and foscarnet do not substantially differ in effectiveness from trifluridine or acyclovir. Ganciclovir is at least as effective as acyclovir. The addition of interferon to a nucleoside antiviral agent and the combination of debridement with antiviral treatment need to be further assessed to substantiate any possible advantage in healing.

Blood pressure control for diabetic retinopathy

Published: January 2015
Do DV, Wang X, Vedula SS, Marrone M, Sleilati G, Hawkins BS, Frank RN

Authors’ conclusions:
Hypertension is a well-known risk factor for several chronic conditions in which lowering blood pressure has proven to be beneficial. The available evidence supports a beneficial effect of intervention to reduce blood pressure with respect to preventing diabetic retinopathy for up to 4 to 5 years. However, the lack of evidence to support such intervention to slow progression of diabetic retinopathy or to prevent other outcomes considered in this review, along with the relatively modest support for the beneficial effect on incidence, weakens the conclusion regarding an overall benefit of intervening on blood pressure solely to prevent diabetic retinopathy.

Optical coherence tomography (OCT) for detection of macular oedema in patients with diabetic retinopathy

Published: January 2015

Authors’ conclusions:
Using retinal thickness thresholds lower than 300 µm and ophthalmologist's fundus assessment as reference standard, central retinal thickness measured with OCT was not sufficiently accurate to diagnose the central type of CSMO in patients with DR referred to retina clinics. However, at least OCT false positives are generally cases of subclinical DMO that cannot be detected clinically but still suffer from increased risk of disease progression. Therefore, the increasing availability of OCT devices, together with their precision and the ability to inform on retinal layer structure, now make OCT widely recognised as the new reference standard for assessment of DMO, even in some screening settings. Thus, this review will not be updated further.
**Topical non-steroidal anti-inflammatory agents for diabetic cystoid macular oedema**

*Published: February 2015*

**Sahoo S, Barua A, Myint K, Haq A, Abas ABL, Nair NS**

*Authors’ conclusions:*

The review did not identify any RCTs investigating the effects of topical NSAIDs in the treatment of diabetic CMO. Most of the studies identified through the electronic searches had been conducted to analyse the effect of topical NSAIDs for pseudophakic CMO. In the absence of high quality evidence, clinicians need to use their clinical judgement and other low level evidence, such as observational non-randomised trials, to decide whether to use topical NSAIDs in cases of diabetic CMO. More research is needed to better understand the cause of this condition and its pathophysiology. This systematic review has identified the need for well designed, adequately powered RCTs to assess possible beneficial and adverse effects of topical NSAIDs in people with diabetic CMO. Future trials should aim to include a large sample size with an adequate follow-up period of up to one year.

**Statins for age-related macular degeneration**

*Published: February 2015*

**Gehlbach P, Li T, Hatef E**

*Authors’ conclusions:*

Evidence from currently available RCTs is insufficient to conclude that statins have a role in preventing or delaying the onset or progression of AMD.

**Face washing promotion for preventing active trachoma**

*Published: February 2015*

**Ejere HOD, Alhassan MB, Rabiu M**

*Authors’ conclusions:*

There is evidence from one trial that face washing combined with topical tetracycline may be effective in reducing severe active trachoma and in increasing the prevalence of clean faces at one year follow-up. Current evidence is inconclusive as to the effectiveness of face washing alone or in combination with topical tetracycline in reducing active or severe trachoma.

**Surgical interventions for primary congenital glaucoma**

*Published: January 2015*

**Ghate D, Wang X**

*Authors’ conclusions:*

No conclusions could be drawn from the trials included in this review due to paucity of data. More research is needed to determine which of the many surgeries performed for PCG are effective.

**Mohs micrographic surgery versus surgical excision for periocular basal cell carcinoma**

*Published: January 2015*

**Narayanan K, Hadid O H, Barnes E A**

*Authors’ conclusions:*

No reliable conclusions could be reached regarding which method of treatment (SE or MMS) resulted in a lower recurrence or complication rate for periocular BCC. No studies were found comparing the cost of either method directly. High quality RCTs are therefore needed to improve the evidence base for the management of this condition.
Predictive value of heidelberg retina tomograph parameters for the development of glaucoma in the European glaucoma prevention study
Author(s) Miglior S, Zeyen T, Hoffmann EM, Torri V, Rulli E, Floriani I, Poli D, Aliyeva S, Cunha-Vaz J, Pfeiffer N
Citation: American Journal of Ophthalmology, February 2015, vol./is. 159/2(265-76.e1), 0002-9394;1879-1891 (2015 Feb)

Glaucmatous retinal nerve fiber layer thickness loss is associated with slower reaction times under a divided attention task.
Author(s) Tatham AJ, Boer ER, Rosen PN, Della Penna M, Meira-Freitas D, Weinreb RN, Zangwill LM, Medeiros FA
Citation: American Journal of Ophthalmology, November 2014, vol./is. 158/5(1008-17), 0002-9394;1879-1891 (2014 Nov)

Influences of the inner retinal sublayers and analytical areas in macular scans by spectral-domain OCT on the diagnostic ability of early glaucoma.
Author(s) Nakatani Y, Higashide T, Ohkubo S, Sugiyama K
Citation: Investigative Ophthalmology & Visual Science, November 2014, vol./is. 55/11(7479-85), 0146-0404;1552-5783 (2014 Nov)

A control experiment for studies that show improved visual sensitivity with intraocular pressure lowering in glaucoma.
Author(s) Anderson AJ, Stainer MJ
Citation: Ophthalmology, October 2014, vol./is. 121/10(2028-32), 0161-6420;1549-4713 (2014 Oct)

Long-term 24-hour intraocular pressure control with travoprost monotherapy in patients with primary open-angle glaucoma.
Author(s) Riva I, Katsanos A, Floriani I, Biagioli E, Konstas AG, Centofanti M, Quaranta L
Citation: Journal of Glaucoma, October 2014, vol./is. 23/8(535-40), 1057-0829;1536-481X (2014 Oct-Nov)

Twice-daily brinzolamide/brimonidine fixed combination versus brinzolamide or brimonidine in open-angle glaucoma or ocular hypertension.
Author(s) Aung T, Laganovska G, Hernandez Paredes TJ, Branch JD, Tsorbatzoglou A, Goldberg I
Citation: Ophthalmology, December 2014, vol./is. 121/12(2348-55), 0161-6420;1549-4713 (2014 Dec)

Effect of pegaptanib sodium 0.3 mg intravitreal injections (Macugen) in intraocular pressure: posthoc analysis from V.I.S.I.O.N. study.
Author(s) Boyer DS, Goldbaum M, Leys AM, Starita C, V.I.S.I.O.N. Study Group
Citation: British Journal of Ophthalmology, November 2014, vol./is. 98/11(1543-6), 0007-1161;1468-2079 (2014 Nov)

Monthly versus as-needed ranibizumab injections in patients with retinal vein occlusion: the SHORE study.
Author(s) Campochiaro PA, Wykoff CC, Singer M, Johnson R, Marcus D, Yau L, Sternberg G
Citation: Ophthalmology, December 2014, vol./is. 121/12(2432-42), 0161-6420;1549-4713 (2014 Dec)
Antioxidative capacity of a dietary supplement on retinal hemodynamic function in a human lipopolysaccharide (LPS) model.
Citation: Investigative Ophthalmology & Visual Science, January 2015, vol./is. 56/1(403-11), 0146-0404;1552-5783 (2015 Jan)

Role of subconjunctival bevacizumab as an adjuvant to primary trabeculectomy: a prospective randomized comparative 1-year follow-up study.
Author(s) Akkan JU, Cilsim S
Citation: Journal of Glaucoma, January 2015, vol./is. 24/1(1-8), 1057-0829;1536-481X (2015 Jan)

Induction with intravitreal bevacizumab every two weeks in the management of neovascular age-related macular degeneration.
Author(s) Barikian A, Mahfoud Z, Abdulaal M, Safar A, Bashshur ZF
Citation: American Journal of Ophthalmology, January 2015, vol./is. 159/1(131-7), 0002-9394;1879-1891 (2015 Jan)

Efficacy and safety of intravitreal aflibercept injection in wet age-related macular degeneration: outcomes in the Japanese subgroup of the VIEW 2 study.
Citation: British Journal of Ophthalmology, January 2015, vol./is. 99/1(92-7), 0007-1161;1468-2079 (2015 Jan)

Intraretinal cysts are the most relevant prognostic biomarker in neovascular age-related macular degeneration independent of the therapeutic strategy.
Author(s) Ritter M, Simader C, Bolz M, Deak GG, Mayr-Sponer U, Sayegh R, Kundi M, Schmidt-Erfurth UM
Citation: British Journal of Ophthalmology, December 2014, vol./is. 98/12(1629-35), 0007-1161;1468-2079 (2014 Dec)

Outer retinal tubulation in the comparison of age-related macular degeneration treatments trials (CATT).
Author(s) Lee JY, Folgar FA, Maguire MG, Ying GS, Toth CA, Martin DF, Jaffe GJ, CATT Research Group
Citation: Ophthalmology, December 2014, vol./is. 121/12(2423-31), 0161-6420;1549-4713 (2014 Dec)

Comparison of optical coherence tomography assessments in the comparison of age-related macular degeneration treatments trials.
Author(s) Folgar FA, Jaffe GJ, Ying GS, Maguire MG, Toth CA, Comparison of Age-Related Macular Degeneration Treatments Trials Research Group
Citation: Ophthalmology, October 2014, vol./is. 121/10(1956-65), 0161-6420;1549-4713 (2014 Oct)

Omega-3 supplementation combined with anti-vascular endothelial growth factor lowers vitreal levels of vascular endothelial growth factor in wet age-related macular degeneration.
Author(s) Rezende FA, Lapalme E, Qian CX, Smith LE, SanGiovanni JP, Sapieha P
Citation: American Journal of Ophthalmology, November 2014, vol./is. 158/5(1071-78), 0002-9394;1879-1891 (2014 Nov)
The neovascular age-related macular degeneration database: report 2: incidence, management, and visual outcomes of second treated eyes.  
Citation: Ophthalmology, October 2014, vol./is. 121/10(1966-75), 0161-6420;1549-4713 (2014 Oct)

A randomized clinical trial of intravitreal bevacizumab versus intravitreal dexamethasone for diabetic macular edema: the BEVORDEX study  
Author(s) Gillies MC, Lim LL, Campain A, Quin GJ, Salem W, Li J, Goodwin S, Aroney C, McAllister IL, Fraser-Bell S  
Citation: Ophthalmology, December 2014, vol./is. 121/12(2473-81), 0161-6420;1549-4713 (2014 Dec)

Vision-related function after ranibizumab treatment for diabetic macular edema: results from RIDE and RISE.  
Author(s) Bressler NM, Varma R, Suner IJ, Dolan CM, Ward J, Ehrlich JS, Colman S, Turpcu A, RIDE and RISE Research Groups  
Citation: Ophthalmology, December 2014, vol./is. 121/12(2461-72), 0161-6420;1549-4713 (2014 Dec)

Comparative evaluation between ranibizumab combined with laser and bevacizumab combined with laser versus laser alone for macular oedema secondary to branch retinal vein occlusion.  
Author(s) Azad SV, Salman A, Mahajan D, Sain S, Azad R  
Citation: Middle East African journal of ophthalmology, October 2014, vol./is. 21/4(296-301), 0974-9233;0975-1599 (2014 Oct-Dec)

Sustained delivery fluocinolone acetonide vitreous implants: long-term benefit in patients with chronic diabetic macular edema.  
Citation: Ophthalmology, October 2014, vol./is. 121/10(1892-903), 0161-6420;1549-4713 (2014 Oct)

Three-year, randomized, sham-controlled trial of dexamethasone intravitreal implant in patients with diabetic macular edema.  
Author(s) Boyer DS, Yoon YH, Belfort R Jr, Bandello F, Maturi RK, Augustin AJ, Li XY, Cui H, Hashad Y, Whitcup SM, Ozurdex MEAD Study Group  
Citation: Ophthalmology, October 2014, vol./is. 121/10(1904-14), 0161-6420;1549-4713 (2014 Oct)

Three-dimensional automated choroidal volume assessment on standard spectral-domain optical coherence tomography and correlation with the level of diabetic macular edema.  
Author(s) Gerendas BS, Waldstein SM, Simader C, Deak G, Hajnajeeb B, Zhang L, Bogunovic H, Abramoff MD, Kundi M, Sonka M, Schmidt-Erfurth U  
Citation: American Journal of Ophthalmology, November 2014, vol./is. 158/5(1039-48), 0002-9394;1879-1891 (2014 Nov)

Intravitreal aflibercept for macular edema secondary to central retinal vein occlusion: 18-month results of the phase 3 GALILEO study.  
Citation: American Journal of Ophthalmology, November 2014, vol./is. 158/5(1032-8), 0002-9394;1879-1891 (2014 Nov)
A double-blind, placebo-controlled study on the effects of lutein and zeaxanthin on photostress recovery, glare disability, and chromatic contrast.

Author(s) Hammond BR, Fletcher LM, Roos F, Wittwer J, Schalch W
Citation: Investigative Ophthalmology & Visual Science, December 2014, vol./is. 55/12(8583-9), 0146-0404;1552-5783 (2014 Dec)
Publication Date: December 2014

Visual cycle suppression via patching in central serous chorioretinopathy.

Author(s) Earl JB, Lee CS, Yom V, Van Stavern GP, Abutti M, Chin-Yee D, Rao PK, Apte RS
Citation: Ophthalmology, December 2014, vol./is. 121/12(2502-4.e1), 0161-6420;1552-4713 (2014 Dec)

Three-year visual outcome of photodynamic therapy plus intravitreal bevacizumab with or without subtenon triamcinolone acetonide injections for polypoidal choroidal vasculopathy.

Author(s) Sakai T, Ohkuma Y, Kohno H, Hayashi T, Watanabe A, Tsuneoka H
Citation: British Journal of Ophthalmology, December 2014, vol./is. 98/12(1642-8), 0007-1161;1468-2079 (2014 Dec)

High-resolution adaptive optics retinal imaging of cellular structure in choroideremia.

Author(s) Morgan JI, Han G, Klinman E, Maguire WM, Chung DC, Maguire AM, Bennett J
Citation: Investigative Ophthalmology & Visual Science, October 2014, vol./is. 55/10(6381-97), 0146-0404;1552-5783 (2014 Oct)

A comprehensive clinical study about patching after strabismus surgery.

Author(s) Zhang W, Zeng J, Liao J, Yang T, Ren J, Zhou X, Liu L
Citation: European Journal of Ophthalmology, November 2014, vol./is. 24/6(819-23), 1120-6721;1724-6016 (2014 Nov-Dec)

Wide-field fundus autofluorescence imaging to evaluate retinal function in patients with retinitis pigmentosa.

Author(s) Ogura S, Yasukawa T, Kato A, Usui H, Hirano Y, Yoshida M, Ogura Y
Citation: American Journal of Ophthalmology, November 2014, vol./is. 158/5(1093-8), 0002-9394;1879-1891 (2014 Nov)

A comparison of progressive loss of the ellipsoid zone (EZ) band in autosomal dominant and X-linked retinitis pigmentosa.

Author(s) Cai CX, Locke KG, Ramachandran R, Birch DG, Hood DC
Citation: Investigative Ophthalmology & Visual Science, November 2014, vol./is. 55/11(7417-22), 0146-0404;1552-5783 (2014 Nov)

Unilateral endoscopic optic nerve decompression for idiopathic intracranial hypertension: a series of 10 patients.

Author(s) Sencer A, Akcakaya MO, Basaran B, Yorukoglu AG, Aydoseli A, Aras Y, Sencan F, Satana B, Aslan I, Unal OF, Izgi N, Canbolat A
Citation: World Neurosurgery, November 2014, vol./is. 82/5(745-50), 1878-8750 (2014 Nov)

Regulation of retinal oxygen metabolism in humans during graded hypoxia.

Citation: American Journal of Physiology - Heart & Circulatory Physiology, November 2014, vol./is. 307/10(H1412-8), 0363-6135;1522-1539 (2014 Nov 15)

Long overall survival after dendritic cell vaccination in metastatic uveal melanoma patients.

Author(s) Bol KF, Mensink HW, Aarnzen IH, Schreiber G, Keunen JE, Couli PG, de Klein A, Punz CJ, Paridaens D, Figdor CG, de Vries IJ
Citation: American Journal of Ophthalmology, November 2014, vol./is. 158/5(939-47), 0002-9394;1879-1891 (2014 Nov)
Factors affecting perceptual thresholds in a suprachoroidal retinal prosthesis.
Author(s) Shivdasani MN, Sinclair NC, Dimitrov PN, Varsamidis M, Ayton LN, Luu CD, Perera T, McDermott HJ, Blamey PJ, Bionic Vision Australia Consortium
Citation: Investigative Ophthalmology & Visual Science, October 2014, vol./is. 55/10(6467-81), 0146-0404;1552-5783 (2014 Oct)

CNGB3-achromatopsia clinical trial with CNTF: diminished rod pathway responses with no evidence of improvement in cone function.
Author(s) Zein WM, Jeffrey BG, Wiley HE, Turriff AE, Tumminia SJ, Tao W, Bush RA, Marangoni D, Wen R, Wei LL, Sieving PA
Citation: Investigative Ophthalmology & Visual Science, October 2014, vol./is. 55/10(6301-8), 0146-0404;1552-5783 (2014 Oct)

Comparison of different surgery procedures for convergence insufficiency-type intermittent exotropia in children.
Author(s) Wang B, Wang L, Wang Q, Ren M
Citation: British Journal of Ophthalmology, October 2014, vol./is. 98/10(1409-13), 0007-1161;1468-2079 (2014 Oct)

High-resolution adaptive optics retinal imaging of cellular structure in choroideremia.
Author(s) Morgan JI, Han G, Klinman E, Maguire WM, Chung DC, Maguire AM, Bennett J
Citation: Investigative Ophthalmology & Visual Science, October 2014, vol./is. 55/10(6381-97), 0146-0404;1552-5783 (2014 Oct)

A randomized clinical trial comparing methotrexate and mycophenolate mofetil for noninfectious uveitis.
Citation: Ophthalmology, October 2014, vol./is. 121/10(1863-70), 0161-6420;1549-4713 (2014 Oct)

Horizon scanning centre

XEN Gel Stent for glaucoma treatment
Ranibizumab (Lucentis) for Choroidal Neovascularisation and Macular Oedema
Aflibercept solution (Eylea) for visual impairment due to macular oedema secondary to branch retinal vein occlusion

Macular Society

Treatment of wet AMD with Avastin requested
NICE clinical guidelines for AMD
Lasers could help to reverse early signs of AMD
Smokers risk up to eight years of good sight
Behind the headlines

Gene therapy could help with inherited blindness  (Dec 10 2014)

Journals

American Journal of Ophthalmology
British Journal of Ophthalmology
Experimental Eye Research
International Journal of Ophthalmic Practice
Investigative Ophthalmology and Visual Science
JAMA Ophthalmology  (formerly Archives of Ophthalmology)
Ophthalmology
Progress in Retinal and Eye Research
Retina – the Journal of Retinal and Vitreous Diseases
Survey of Ophthalmology
The Ocular Surface