



A summary of prescribing recommendations from NICE guidance

Glaucoma

NICE NG81: 2017

This guideline covers diagnosis and management of chronic open-angle glaucoma (COAG) and ocular hypertension (OHT) in adults aged ≥ 18 years.

	Definition of terms
COAG	chronic open-angle glaucoma
OHT	ocular hypertension
PGA	prostaglandin analogue
IOP	intraocular pressure
MMC	mitomycin C

Case-finding - see [NICE pathway](#).

Assessment and diagnosis

- ◆ For information on standard practice for assessment and diagnosis of COAG and related conditions and referral please see [NICE pathway](#).

General principles

- ◆ Take into account any cognitive and physical impairments when making decisions about management and treatment.
- ◆ Check that there are no relevant comorbidities or potential drug interactions before offering pharmacological treatment.

Treatment and management

OHT

- ◆ Offer a generic PGA* to people with IOP ≥ 24 mmHg if they are at risk of visual impairment within their lifetime.
- ◆ **Do NOT** offer treatment to people with OHT who are not at risk of visual impairment in their lifetime. Advise people to continue regular visits to their primary eye care professional, at clinically appropriate intervals.
- ◆ Offer another pharmacological treatment to people with an IOP ≥ 24 mmHg who cannot tolerate their current treatment:
 - > **First choice:** alternative generic PGA*, if available.
 - If this is not tolerated:
 - > offer a beta-blocker.
 - If none of these options are tolerated:
 - > offer non-generic PGA, carbonic anhydrase inhibitors**, sympathomimetics, miotics or a combination of treatments.
- ◆ Offer a drug from another therapeutic class (see [Box 1](#)) to people with an IOP ≥ 24 mmHg whose current treatment is not reducing IOP sufficiently to prevent risk of progression to sight loss***.
- ◆ Refer people whose IOP cannot be reduced sufficiently with pharmacological treatment to a consultant ophthalmologist to discuss other options to prevent risk of progression to sight loss.
- ◆ Offer preservative-free eye drops to people who have an allergy to preservatives or people with clinically significant and symptomatic ocular surface disease, but only if they are at high risk of conversion to COAG.
- ◆ See [NICE Evidence summary glaucoma: brinzolamide/brimonidine combination eye drops](#).

U unlicensed. Obtain and document informed consent.

Suspected COAG

- ◆ **Do NOT** offer treatment to people with suspected COAG and IOP < 24 mmHg. Advise people to continue regular visits to their primary eye care professional, at clinically appropriate intervals.
- ◆ Offer a generic PGA* to people with suspected COAG and IOP ≥ 24 mmHg, in line with recommendations on treatment for people with OHT.

Stopping treatment

- ◆ Discuss benefits and risks of stopping treatment with people with OHT or suspected COAG who have both:
 - > low risk of ever developing visual impairment within their lifetime, **AND**
 - > acceptable IOP.
- ◆ If a person decides to stop treatment offer to assess IOP in 1 to 4 months with further reassessment if clinically indicated.

COAG

- ◆ Offer a generic PGA*.
- ◆ Offer people with advanced COAG, surgery with pharmacological augmentation (MMC U) as indicated.
- ◆ Offer information on risks and benefits associated with surgery.
- ◆ Offer people who present with advanced COAG and who are listed for surgery, interim treatment with a generic PGA*.
- ◆ Encourage people to continue with the same pharmacological treatment unless:
 - > IOP cannot be reduced sufficiently to prevent risk of progression to sight loss, **OR**
 - > there is progression of optic nerve head damage, **OR**
 - > there is progression of visual field defect, **OR**
 - > they cannot tolerate the drug.
- ◆ Ask about adherence to treatment and check eye drop instillation technique in people whose IOP has not been reduced sufficiently to prevent risk of progression to sight loss.
- ◆ If adherence and eye drop instillation technique are satisfactory offer one of the following:
 - > a drug from another therapeutic class*** (see [Box 1](#)), **OR**
 - > laser trabeculoplasty, **OR**
 - > surgery with pharmacological augmentation (MMC U) as indicated.
- ◆ After trying drugs from two therapeutic classes, consider offering surgery with pharmacological augmentation (MMC U) as indicated or laser trabeculoplasty.
- ◆ Offer surgery with pharmacological augmentation (MMC U) as indicated to people with COAG who are at risk of progressing to sight loss despite treatment.
- ◆ Offer information on risks and benefits associated with surgery.

* not all generic PGAs have a UK marketing authorisation for first-line treatment.

** Some carbonic anhydrase inhibitors are licensed for use only when beta-blockers not tolerated or contraindicated

***topical drugs from different therapeutic classes may be needed at the same time to control IOP

Glaucoma.....continued
NICE NG81; 2017

- ◆ Consider offering people with COAG who cannot tolerate a treatment:
 - a drug from another therapeutic class (see **Box 1**), **OR**
 - preservative-free eye drops if there is evidence that the person is allergic to the preservative or has clinically significant and symptomatic ocular surface disease.
- ◆ After trying drugs from two therapeutic classes, consider offering surgery with pharmacological augmentation (MMC^U) as indicated or laser trabeculoplasty.
- ◆ After surgery, offer people with COAG whose IOP has not been reduced sufficiently to prevent the risk of progression to sight loss one of the following:
 - pharmacological treatment ^{...}, **OR**
 - further surgery, **OR**
 - laser trabeculoplasty or cyclodiode laser treatment.
- ◆ Offer people with COAG who prefer not to have surgery or for whom surgery is not suitable:
 - pharmacological treatment ^{...},
 - laser trabeculoplasty or cyclodiode laser treatment.

Box 1

Eye drops: therapeutic drug classes	
Beta-blocker	e.g. betaxolol, levobunolol, timolol
Carbonic anhydrase inhibitor	e.g. brinzolamide, dorzolamide
Miotics	e.g. pilocarpine
PGA	e.g. bimatoprost, latanoprost, tafluprost, travoprost
Sympathomimetics	e.g. apraclonidine, brimonidine

Preoperative tests - see NICE pathway

Reassessment - see NICE pathway

Organisation of care - see NICE pathway

Recommendations – wording used such as ‘offer’ and ‘consider’ denote the strength of the recommendation.

Drug recommendations – the guideline assumes that prescribers will use a drug’s Summary of Product Characteristics (SPC) to inform treatment decisions.

Providing information

- ◆ Offer people opportunity to discuss their diagnosis, referral, prognosis, treatment and discharge. Provide them with relevant information in an accessible format at initial and subsequent visits which may include:
 - their specific condition (OHT, suspected COAG and COAG), its life-long implications and prognosis for retention of sight,
 - that COAG in the early stages, OHT and suspected COAG are symptomless,
 - that most people having treatment for COAG will have good quality of life and not go blind,
 - that once lost, sight cannot be recovered,
 - that glaucoma can run in families and that family members may wish to be tested for the condition,
 - the importance of the person’s role in their own treatment e.g. ongoing regular application of eye drops to preserve sight,
 - different types of treatment options, including mode of action, frequency and severity of side effects, and risks and benefits of treatment, so that people are able to take an active part in decision-making. See NICE pathway: Medicines optimisation,
 - how to apply eye drops, including technique and hygiene,
 - need for regular monitoring as specified by the healthcare professional,
 - methods of investigation during assessment,
 - how long each appointment is likely to take and whether the person will need any help to attend (e.g. driving soon after pupil dilatation would be inadvisable),
 - the eye clinic liaison officer,
 - support organisations and support groups,
 - compliance aids (such as dispensers) available from their GP or community pharmacist,
 - Letter of Vision Impairment, Referral of Vision Impairment and Certificate of Vision Impairment, registration,
 - Driver and Vehicle Licensing Agency regulations.
- U unlicensed. Obtain and document informed consent.

***topical drugs from different therapeutic classes may be needed at the same time to control IOP.

Please go to www.nice.org.uk to check for any recent updates to this guideline.

The table below lists all NICE guidance included in NICE Bites in 2017:

NICE Guidance	NICE Guidance	NICE Bites Month/issue number
Antimicrobial stewardship: changing risk-related behaviours in general population	NICE NG63; 2017	February 2017/94
Bisphosphonates for treating osteoporosis	NICE TA464; 2017	September/October 2017/100
Cerebral palsy in under 25’s	NICE NG62; 2017	May 2017/97
Eating disorders: recognition and treatment	NICE NG69; 2017	June 2017/98
Glaucoma	NICE NG 81; 2017	December 2017/102
Low back pain and sciatica in over 16’s	NICE NG59; 2016	January 2017/93
Managing medicines for adults receiving social care in the community	NICE NG67; 2017	April 2017/96
Osteoporosis; assessing the risk of fragility fractures	NICE CG146;2012	September/October 2017/100
Parkinson’s disease in adults	NICE NG71; 2017	July/August/99
Sinusitis (acute); antimicrobial prescribing	NICE NG79; 2017	November 2017/101
Spondyloarthritis in over 16’s: diagnosis and management	NICE NG65; 2017	March 2017/95

