The effectiveness of early lens extraction with intraocular lens implantation for the treatment of primary angle closure glaucoma

Submission date 22/08/2008	Recruitment status No longer recruiting	[X] Prospectively registered [_] Protocol
Registration date 23/10/2008	Overall study status Completed	 [] Statistical analysis plan [X] Results
Last Edited 16/01/2017	Condition category Eye Diseases	[_] Individual participant data

Plain English Summary Not provided at time of registration

Study website http://www.charttrials.abdn.ac.uk/eagle

Contact information

Type(s) Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

EME 09/800/26 (as of 15/07/2010, previously MRC: G0701604)

Study information

Scientific Title

The effectiveness of early lens extraction with intraocular lens implantation for the treatment of primary angle closure glaucoma: a randomised controlled trial (EAGLE)

Acronym

EAGLE (Effectiveness, in Angle-closure Glaucoma of Lens Extraction)

Study hypothesis

In patients with primary angle closure glaucoma (PACG), this study will compare the clinical and cost-effectiveness of early lens extraction surgery compared with standard care (usually laser iridotomy followed by a sequence of medical therapy, laser iridoplasty and trabeculectomy).

Ethics approval required

Old ethics approval format

Ethics approval(s) North of Scotland Research Ethics Committee 2, 09/10/2008, ref: 08/S0802/153

Study design Multinational randomised controlled trial

Primary study design Interventional

Secondary study design Randomised controlled trial

Study setting(s) Hospital

Study type(s) Treatment

Participant information sheet Can be downloaded from https://viis.abdn.ac.uk/HSRU/eagle/DownloadDefault.aspx

Condition Primary angle closure glaucoma

Interventions

The participants will be randomly allocate to the following treatments: Intervention group: Early lens extraction with intraocular lens implantation Control group: Standard care (usually laser iridotomy followed, as necessary, by a sequence of medical therapy, laser iridoplasty and trabeculectomy)

Intervention Type

Procedure/Surgery

Primary outcome measure

1. Patient-centred outcome: Health Status, assessed by the EQ-5D at 6, 12, and 24 months with the major outcome assessment at 36 months from the date of randomisation

2. Clinical outcome: IOP at 3 year final assessment

3. Economic outcome: Incremental cost per quality adjusted life year (QALY) gained with QALYs based on the responses to the EQ-5D

Secondary outcome measures

The following will be assessed at 6, 12, and 24 months with the major outcome assessment at 36 months from the date of randomisation:

1. Patient-centred:

Patient reported, using:

- 1.1. A glaucoma specific utility instrument (GPI)
- 1.2. A vision specific health profile measure (NEI-VFQ25)

2. Clinical:

- 2.1. Need for trabeculectomy
- 2.2. Progressive visual field loss
- 2.3. Best-corrected visual acuity (ETDRS)
- 2.4. Extension of angle closure (degrees of appositional and synechial angle closure)
- 2.5. Escalation of therapy
- 2.6. Number of anti-glaucoma medications
- 2.7. Intolerance of medications
- 2.8. Incidence of acute attacks of angle closure
- 3. Economic:

Costs will be based on resource use data. Costs to the NHS and patients:

- 3.1. Use of health services for glaucoma related events or treatments
- 3.2. Patient costs (treatments, spectacles, travel to health services, sick leave)
- 3.3. Need for alternative management for glaucoma (e.g., surgery, drugs)
- 3.4. Other use of health services: visits to i) GP, ii) nurse, iii) optometrists

Overall study start date

01/11/2008

Overall study end date

31/12/2014

Eligibility

Participant inclusion criteria

1. Both males and females, age >=50 years

2. Diagnosis: either one of the following two types of patients: (i) primary angle-closure glaucoma (PACG), or (ii) primary angle-closure (PAC) with intraocular pressure (IOP) >30 mm Hg 3. Newly diagnosed, i.e. either (i) untreated or (ii) under medical treatment for 6 months or less

4. Angle closure (iridotrabecular contact) in 180 degrees or more

5. Patient must be phakic in the affected eye(s)

6. Written informed consent obtained

Participant type(s)

Patient

Age group

Senior

Sex Both

Target number of participants

400 - The trial aims to recruit half of the participants in the UK (n = 200) and the other half in Hong Kong, Malaysia, Singapore and China combined (n = 200).

Participant exclusion criteria

1. Advanced glaucoma in the potentially eligible eye as determined by either: (i) visual field loss (mean deviation worse than -15dB) or (ii) cup-disc-ratio >0.9

2. Previously diagnosed acute angle closure attack in the potentially eligible eye

3. Increased surgical risk: e.g., corneal opacity, Fuch's endothelial dystrophy, pseudoexfoliation, previous vitreo-retinal surgery, not able to be positioned to undergo standard technique

- 4. Symptomatic cataract in either eye
- 5. Previous cataract surgery or laser iridotomy in study eye
- 6. Axial length <19 mm (nanophthalmos)
- 7. Secondary angle closure glaucoma
- 8. History of retinal ischaemia, macular oedema or wet age-related macular degeneration
- 9. Medically unfit for surgery or for completion of the trial

Removed from the protocol as of 04/11/10: 10. Life expectancy <3 years

Recruitment start date

01/11/2008

Recruitment end date 31/12/2014

Locations

Countries of recruitment China

Hong Kong

Malaysia

Scotland

Singapore

Study participating centre Aberdeen Royal Infirmary Aberdeen United Kingdom AB25 2ZN

Sponsor information

Organisation NHS Grampian

Sponsor details

Research and Development Office Foresterhill House Annexe Foresterhill Aberdeen United Kingdom AB25 2ZB

Sponsor type Government

Website http://www.nhsgrampian.org/randd

Organisation University of Aberdeen

Sponsor details

Polwarth Building Foresterhill Aberdeen Scotland United Kingdom AB25 2ZD

Sponsor type University/education

Website www.abdn.ac.uk **Organisation** NHS Grampian

Sponsor details

Sponsor type Not defined

Website http://www.nhsgrampian.org/nhsgrampian/gra_display_home_2015.jsp? p_applic=CCC&p_service=Content.show&pContentID=9298&

ROR https://ror.org/00ma0mg56

Funder(s)

Funder type Research council

Funder Name Medical Research Council (MRC) (UK)

Alternative Name(s) Medical Research Council (United Kingdom), UK Medical Research Council, MRC

Funding Body Type Government organisation

Funding Body Subtype National government

Location United Kingdom

Results and Publications

Publication and dissemination plan Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Results article</u>	results	23/05/2011		Yes	Νο
Results article	results	01/10/2016		Yes	No
Other publications	economic evaluation	13/01/2017		Yes	No