Guidelines for referring VR patients: Harrogate only

GENERAL GUIDE

The York VR team is happy to provide vitreoretinal support for patients from Harrogate, but it is important that the referral process is followed carefully and consistently. This collaboration is about shared care, rather than transfer of care.

Emergency patients

1. When referring a patient for emergency VR surgery of any kind, please contact the York Triage Nurse on 01904 726758, or failing that, call the junior doctor on call via Switchboard on 01904 631313 (see Appendix A). These staff members work within the urgent referral team and are trained to take down clinical details using a standardised triage form. They will pass this on to the VR consultant on call and get back to you with advice on what to do next.

2. There may be a delay in getting back to you, as the VR team are frequently in theatre when on call. The triage nurse or junior doctor will aim to get back to you within an hour if possible.

3. For retinal detachments, you will be asked a few standardised questions about the clinical examination (see Appendix B). Please ensure you are able to provide this information before you phone. Please also confirm that the patient can tolerate surgery under LA (sub Tenons block). GA slots are difficult to arrange at short notice and are only suitable for patients who genuinely cannot cope with LA.

4. Please do not wait until the end of your clinic to refer emergency cases: we need to know about these patients as soon as you have seen them, so we can plan their care.

5. Urgent referrals should not, under any circumstances, be sent by email. Please do not involve the Ophthalmology secretaries in emergency referrals: they should not be expected to pass clinical information between clinicians.

6. Please do not discuss with the patient when their surgery is likely to be. This will be determined by the VR surgeon after they have seen the patient.

7. Please scan and email your clinical notes (plus the referring optometrist's letter if applicable) to yhs-tr.requestedVRdocumentsONLY@nhs.net. Please note, this email address is NOT to be used as a method of referral: it is a means of transferring clinical documents, and replaces the previous fax system.

Semi-urgent patients

8. If the case is deemed urgent but non-emergency, dictate a letter and ask your secretary to send it urgently. The letter can be scanned and sent via email to yhs-tr.vr-semi-urgent@nhs.net

Please request a read receipt so you know it has arrived.

Routine patients

9. Please refer these patients via letter to 'The VR team' (to avoid the letter getting held up in the in-tray of a surgeon on leave). It is fine to copy us into your GP letter to save you having to dictate two letters. It is helpful if the letter is structured with a full list of ophthalmic diagnoses and current eye medication, followed by a brief summary of symptoms and other relevant information. It is also helpful to ask your secretary to include the original referral from the optician, if applicable.

The table below is a general guide to the urgency with which different conditions could be referred, and the mode of referral. This table is not exhaustive.

Emergency	**Semi-urgent**	**Routine**
Acute retinal detachment		*Macular hole*
Unexplained vitreous haemorrhage obstructing fundal view	*PDR/RVO vitreous haemorrhage obstructing fundal view*	*Epiretinal membrane*
Dropped nucleus		*Dislocated lens*
Retinal tear that needs top-up retinopexy in theatre		*Vitreomacular traction*
Large submacular haemorrhage		
Triage nurse / Junior Dr. on call	**Semi-urgent letter***	**Letter in post**

*Please ensure the secretary handling the letter knows to type and send it urgently.

RETINAL TEARS

10. Laser retinopexy should always be attempted before cryoretinopexy: It works more quickly, has fewer side effects and buys some time to schedule treatment in theatre if this is needed. For example please attempt a barrier laser to the posterior edge of tears located too anteriorly to complete the laser.
11. If you are unable to perform retinopexy yourself, ask your supervising consultant to attempt the laser before contacting York.

VITREOUS HAEMORRHAGE

12. Cases of haemorrhagic PVD when blood is not obstructing the fundus and you cannot identify a tear with indentation / 3 mirror lens need follow up for repeat examination locally about a week later.
13. Unexplained vitreous haemorrhage obstructing fundal view needs a B-scan and emergency referral to the VR team via triage nurse / junior doctor on-call please.
14. Vitreous haemorrhage obstructing fundal view caused by a known proliferative RVO / diabetes needs a B-scan and an urgent letter referral to the VR team please.

Management of cataract surgery complications

General Advice

1. The York VR team is happy to provide vitreoretinal backup for cataract surgery complications, but it is important that the referral process is followed carefully and consistently.
2. Consider carefully whether your patient will require a GA for their second procedure. If they do, you must ensure that your Day Case nurses and the patient and their relatives are aware of the ***need to fast*** until a plan is in place. If your patient is not fasted, their surgery will be delayed, no matter how urgent it is.
3. If your patient required sedation in your unit, they will need a GA for their second procedure. Ophthalmic surgery in York is only carried out under LA or GA.
4. It is your responsibility to ensure that your patient has appropriate medication with clear, written instructions which will keep the pupil dilated, the eye quiet and the IOP stable until their second procedure. You should consider administering Diamox as a stat dose immediately after surgery, either orally or IV (if GA is planned). The dose administered will depend on the patient's general health and kidney function.
5. Please use the agreed referral pathway for referring a patient for urgent VR surgery: Phone the Triage Nurse on 01904 726758, or failing that, call the junior doctor on call via Switchboard on 01904 631313. Please ***do not*** email urgent referrals over, or contact the Ophthalmology secretaries. The triage nurse and the junior doctor on call are trained to take all urgent referrals and will pass on the clinical details to the VR team. There may be a delay in getting back to you, as the VR team are frequently in theatre when on call. The triage nurse or junior doctor will aim to get back to you within an hour if possible.
6. If you would like to speak to the VR surgeon, please request a call-back and leave your contact details with the triage nurse / junior doctor. We will aim to phone you back within an hour if possible.
7. Please do not send your patient home until you have heard back from York as to the management plan.
8. Please scan and email biometry, op notes and relevant clinic notes to yhs-tr.requestedVRdocumentsONLY@nhs.net ***after*** the referral has been accepted. Please note, this email address is NOT to be used as a method of referral; it is a means of transferring clinical documents, and replaces the previous fax system.
9. Please ensure that your patient and their relatives understand the nature of their complication before they are transferred.

Management of specific clinical scenarios:

Anterior capsule tear

AC tears can be managed successfully, resulting in implantation of an intraocular lens in one procedure.[1-3] Brian Little has written a good article on the management of anterior capsule tears[4], and there are several useful videos on EyeTube as well. Exposed lens matter hydrates and expands over a few hours, causing anterior capsule tears to propagate round to the back of the lens, giving a high likelihood of PCR and dropped lens fragments. It also leads to a rapid postoperative rise in intraocular pressure, causing pain, nausea and vomiting. Patients undergoing surgery in units without VR support on site are at a potential disadvantage, so clinicians will need to be vigilant and proactive.

If the patient is intolerant of acetazolamide or has renal disease making acetazolamide undesirable, then you should consider stabilising the patient surgically by removing as much lens matter as possible and performing anterior vitrectomy if indicated. It is sensible to have a plan in place prior to surgery in such patients. If the patient cannot be stabilised surgically, i.e. by removal of lens matter, they will need to be stabilised medically using Acetazolamide. Treatment should be given immediately after surgery (either on the table or in the recovery room) and should be sufficient to cover the transfer period until they arrive in York. If your patient's IOP is not adequately controlled, their cornea will become cloudy, making further surgery extremely difficult. It is not appropriate to give Mannitol to these patients (see notes on management of raised IOP, below).

Zonule dehiscence / dialysis

If the capsule bag becomes unstable due to zonule dehiscence / dialysis but vitreous has not come forwards, 4 iris hooks (or capsule hooks) can be used to support the anterior capsule so that removal of lens matter can continue. A capsule tension ring is also useful in these cases once lens matter has been removed. Conversion to ECCE is not recommended. Consider implanting a 3-piece IOL in the ciliary sulcus, with or without optic capture. If you have vitreous loss but lens matter is still in place, remove the vitreous from the AC, place a 10-0 nylon suture in the section and refer to the VR surgeon on call, via the agreed route (see Appendix A). Acetazolamide should be given immediately after surgery (either on the table or in the recovery room) and should be sufficient to cover the transfer period until they arrive in York. If your patient's IOP is not adequately controlled, their cornea will become cloudy, making further surgery extremely difficult. It is not appropriate to give Mannitol to these patients (see notes on management of raised IOP, below).

Dropped lens matter / dropped nucleus

These cases should be referred urgently to the VR surgeon on call, via the agreed route (see Appendix A). Please ensure that there is no vitreous in the AC, and that the corneal section is watertight with at least one 10-0 nylon suture in place. Acetazolamide should be given immediately after surgery (either on the table or in the recovery room) and should be sufficient to cover the transfer period until they arrive in York. If your patient's IOP is not

adequately controlled, their cornea will become cloudy, making further surgery extremely difficult. It is not appropriate to give Mannitol to these patients (see notes on management of raised IOP, below).

Management of significantly raised intraocular pressure in postop patients

A patient's IOP can rise for many different reasons postop. An AACG treatment protocol is only appropriate in patients with AACG, and should not automatically be used in all patients with significantly raised IOP.

If a patient has a corneal section (e.g. postop cataract surgery), this can be 'burped' to release fluid from the AC, as long as the AC is deep and there is no vitreous present. Instil topical anaesthetic and povidone iodine, and burp a small amount of fluid at a time, in small increments, until the IOP normalises. Acetazolamide can then be used to ***prevent*** a further IOP rise.

Mannitol is a powerful osmotic agent, and is very effective in drawing water out of the vitreous cavity and therefore reducing pressure. It is important to understand that ***this only lasts a few hours, after which the osmotic effect is reversed***, causing the IOP to spike back up again. Therefore it should ***only*** be used in the context of ***buying some time*** before the patient has a YAG PI (if appropriate, i.e. if the angle is closed), or is taken to theatre. If there is no prospect of surgery occurring in the following few hours, then this medication should not be administered. It is important to note the side effects of Mannitol, which include headaches, nausea and vomiting.

Patients with gas in the eye following VR surgery who also have raised IOP should preferably be discussed with the VR surgeon who operated on them. They should not be given mannitol as this will have no therapeutic benefit, and will make them unwell.

References

1. Little, B. Completing phaco following anterior capsular tear. Saudi J Ophthalmol. 2010 Jul; 24(3): 95–99.

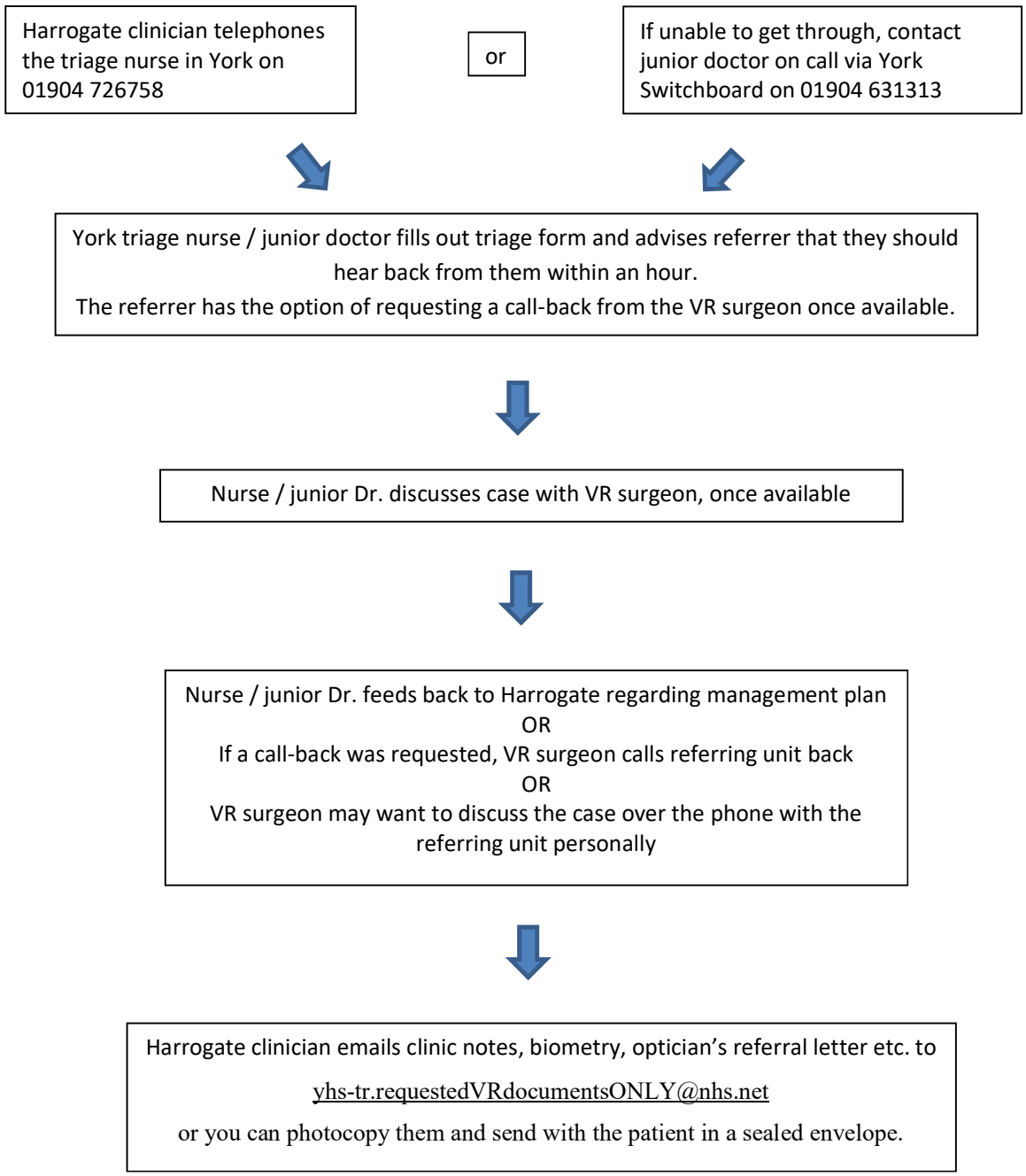
2. Carifi G et al. Complications and outcomes of phacoemulsification cataract surgery complicated by anterior capsule tear. Am J Ophthalmol. 2015 Mar;159(3):463-9.

3. Marques FF et al. Fate of anterior capsule tears during cataract surgery. J Cataract Refract Surg. 2006 Oct;32(10):1638-42.

4. Roelofs KA, Rudnisky CJ. Visual and refractive outcomes following management of anterior capsular tears with a capsulorrhexis relaxing incision. Can J Ophthalmol. 2018 Oct;53(5):533-537.

Appendix A

Referral pathway for emergency VR referrals from Harrogate to York



Appendix B

Retinal detachments: questions the triage nurse will ask you:

1. Duration of symptoms (ie floaters/flashes/scotoma)

2. Location of retinal detachment (superior/inferior/nasal/temporal)

3. Macula on or off (if off – how many days has it been off? i.e. when did central vision drop?).

4. Anticoagulation (INR) and relevant medical history for anaesthesia (respiratory/recent stroke/MI).

5. Anaesthetic plan - Please note local (subTenons) anaesthetic (LA) is the default option; access to general anaesthetic (GA) is limited and should only be considered if the patient *cannot* have LA).

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Appendix C

C-19 Pandemic Community Imaging

If an optometrist in the community has seen a patient during the C-19 pandemic and captured an obvious emergency pathology on imaging e.g. retinal detachment on Optos, the following process has been agreed.

Optometrist refers as normal to Harrogate Ophthalmology department.

After obtaining patient consent, Optometrist arranges with Harrogate on call doctor a secure transfer of non-identifiable patient images to Harrogate (via email).

Harrogate doctor then undertakes a telephonic consultation with patient including presenting symptoms, past medical, surgical and drug/allergy history, including all Appendix B questions.

Harrogate doctor then refers as normal to York Triage Nurse on 01904 726758, or failing that, calls the junior doctor on call via Switchboard on 01904 631313. Part of this referral will require the telephonic consultation summary and imaging to simultaneously be emailed to yhs-tr.requestedVRdocumentsONLY@nhs.net

Harrogate doctor will then receive a call back from Triage nurse with management plan (or VR surgeon if call-back request left with Triage nurse)

[i] Harrogate VR Guidelines
Agreed by L. Wakely, C. Murray, I. Mitrut and G. Addinall, 15th May 2020