ACCSM
AUSTRALASIAN COLLEGE
OF COSMETIC SURGERY AND MEDICINE

Raising Standards – Protecting Patients

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9 February, 2023

ACCSM Filler Blindness Protocol

Please adapt these recommendations for your own clinic.
This is a fluid document, updates may ensue according to research.

Firstly, please **watch** and become familiar with the following **video**: see video here.

Remember Filler Blindness is rare:
Filler related blindness is a 1 in 300,000 risk.
Check history of any ocular or visual problems BEFORE filler treatment. Quick clinical check of vision BEFORE filler treatment.

VITAL - Have Hyaluronidase vials in your rooms!
1500 Units of hyaluronidase in the region of the supratrochlear and supraorbital notches/foramina and origin of filler injection, repeating every 30-60 minutes.

Essential Elements of acute protocol as follows:
1. Massage Eye
2. Brown Paper Bag
3. Hyaluronidase
4. Ophthalmic referral

See table 1 and Figure below.

Table 1: Recommended management of visual disturbance post HA filler.
At presentation:
• Record individual eye vision using written text / Snellen chart on smartphone / laptop
• Check pupil light reflex direct and consensual and check for relative afferent pupillary defect (RAPD)
• Check eye movements and for eyelid ptosis
• Check confrontation visual fields for each eye
After diagnosis, whilst other measures are being prepared:
• Demonstrate to patient and patient to commence ocular massage for five seconds for five minutes
• Hypercapnoea: Rebreathing into a paper bag, limited by symptoms of dizziness
• Consent patient for hyaluronidase treatment
• Have resuscitation equipment available as hyaluronidase has 0.1% risk of anaphylaxis
• Reconstitute 1500IU Hyaluronidase (Wockhardt) in 1ml bacteriostatic saline. To 0.5ml hyaluronidase solution add 0.5ml saline = 750 IU per ml
• Inject hyaluronidase into area where hyaluronic acid was originally injected and all around angiosome distribution of vessel supply by serial puncture (75IU in 0.1ml up to 1500U for vessel distribution)
• If available: preferably IV rather than oral Acetazolamide (Diamox) 500mg bolus & topical ocular antihypertensives (e.g. beta blocker, iodipine, dorzolamide)
• Call local ophthalmology colleague for help, review and follow-up, and prepare transfer
• Bring protocol and hyaluronidase for ophthalmologist as may not have
Ophthalmic interventions and others:
• Inferotemporal quadrant retrobulbar hyaluronidase injection 1500IU in 4ml saline with 25G retrobulbar needle [3] for ocular adnexal ischaemia and for attempted vision rescue
• Limbal paracentesis with removal of 0.1-0.2ml of aqueous from anterior chamber (remove the plunger on an insulin syringe to allow passive filling)
• Repeat hyaluronidase to vascular territory hourly till capillary refill time (CRT) less than four seconds (up to four cycles per day)
• Consider:
1. Repeat retrobulbar hyaluronidase after repeat retinal observation
2. IV heparin / steroid – reduce clot formation allowing access of hyaluronidase to HA / reduce retinal oedema
3. Hyperbaric oxygen
4. Scar management

Ophthalmic investigations (but not if delay treatment):
• Consider neuroimaging with angiography
• Fundus fluorescein angiography
• OCT and photograph facial skin and eye movements

Extracted from:
https://www.thepmfajournal.com/features/features/post/is-there-a-role-for-retrobulbar-hyaluronidase-in-hyaluronic-acid-vascular-embolism-related-vision-loss

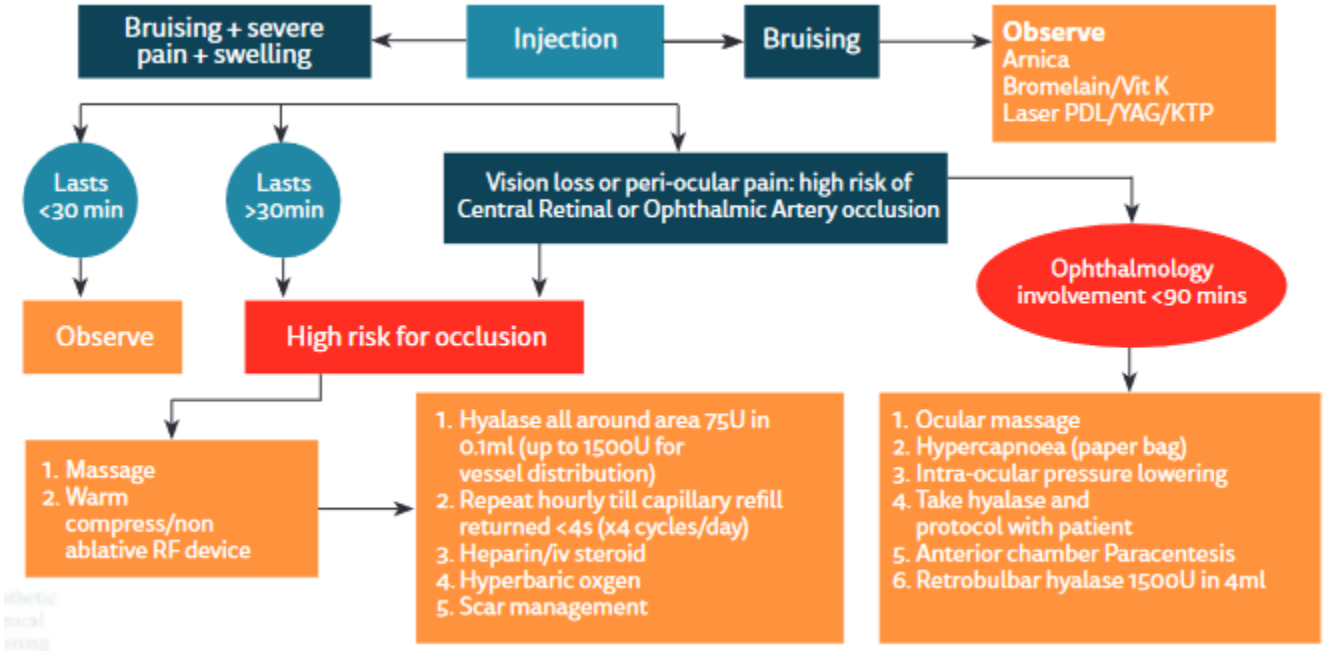

Figure 2: Vision loss and vascular occlusion algorithm.