

Sudden Painless Monocular Vision Loss

UHN EMERGENCY CONFERENCE 2022

TIM STEWART, NURSE PRACTITIONER, STROKE TEAM

Case of Mr. J

21-year-old male

PMHx: R. CRAO/blind R. eye (no clear etiology found), smoker, cannabis, sickle cell trait

Meds: ASA 81mg plus Rivaroxaban 2.5mg BID – NON-COMPLIANT

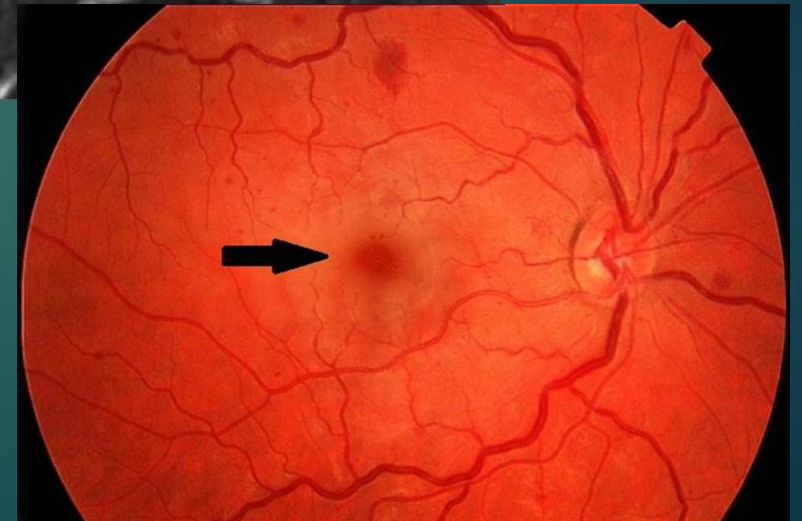
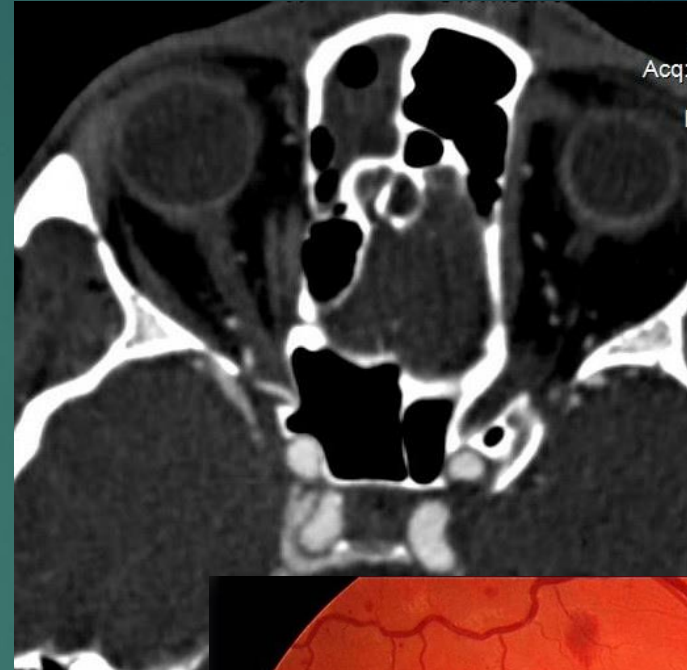
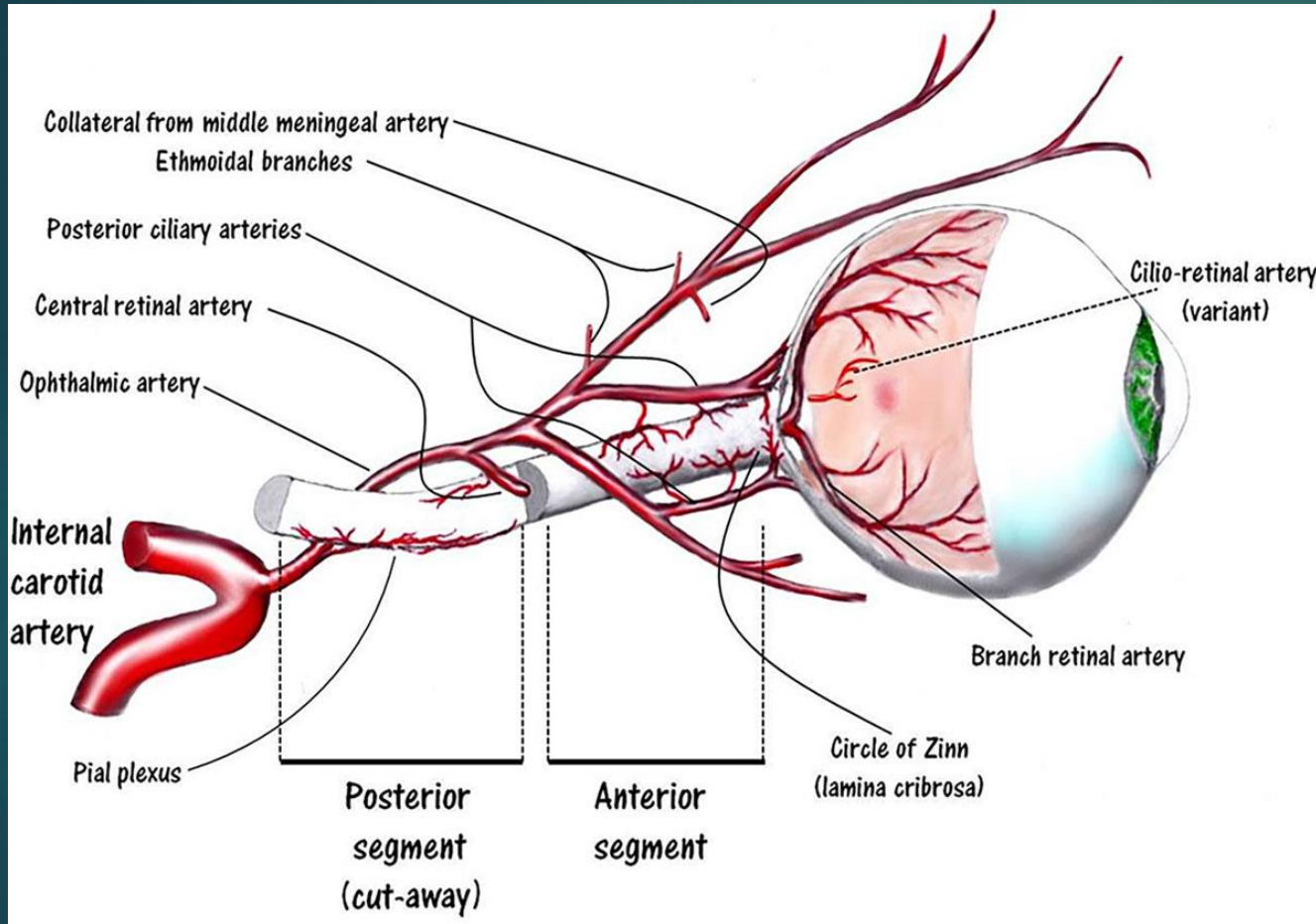
Presented to ED at another hospital after sudden painless vision loss L. eye – Last known well 3:40am

Discharge home to f/u O/P Ophthalmology later that morning – called GP and told to come to TWH

Presented to ED TWH 11:30am and a Code Stroke was initiated. NIHSS 3 for visual field loss

Ophthalmology STAT consult: cherry red spot detected, RAPD – Dx: Left eye CRAO

Central Retinal Artery Occlusion



History / Differential

History

Cover test – 1 eye or both

Pain – no? or yes?

Speed – sudden/fairly static or progressive, LAST KNOWN WELL

Other – vascular risk, CA, auto-immune

Exam

Visual acuity

Visual fields

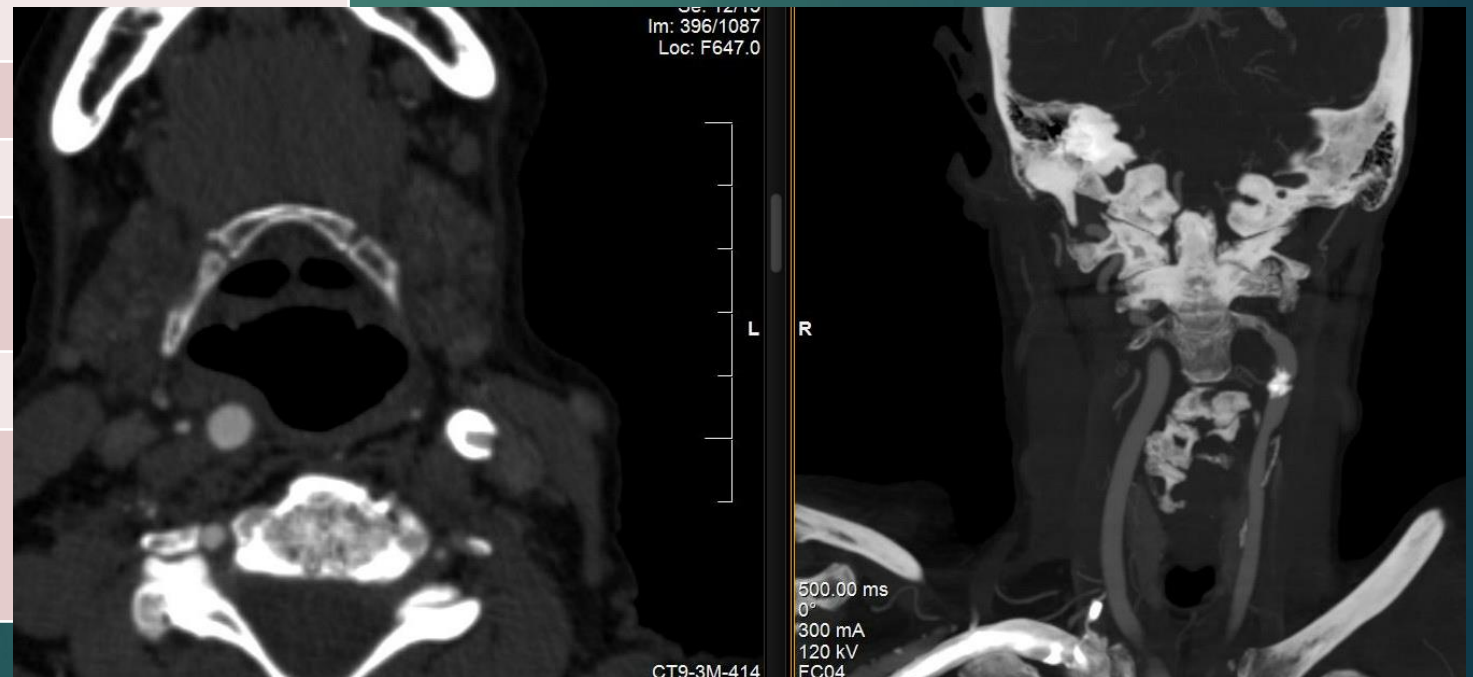
RAPD

Retina/optic disc exam



Investigations / Consults


Investigations	Consults
CBC	STAT assessment by ED MD/NP/PA
Basic metabolic panel	STAT consult to OPHTHALMOLOGY
Coags	Heads-up to stroke service
ESR	
CRP	
Funduscopic photography	
CT Head / CT angiogram carotids	Etiology

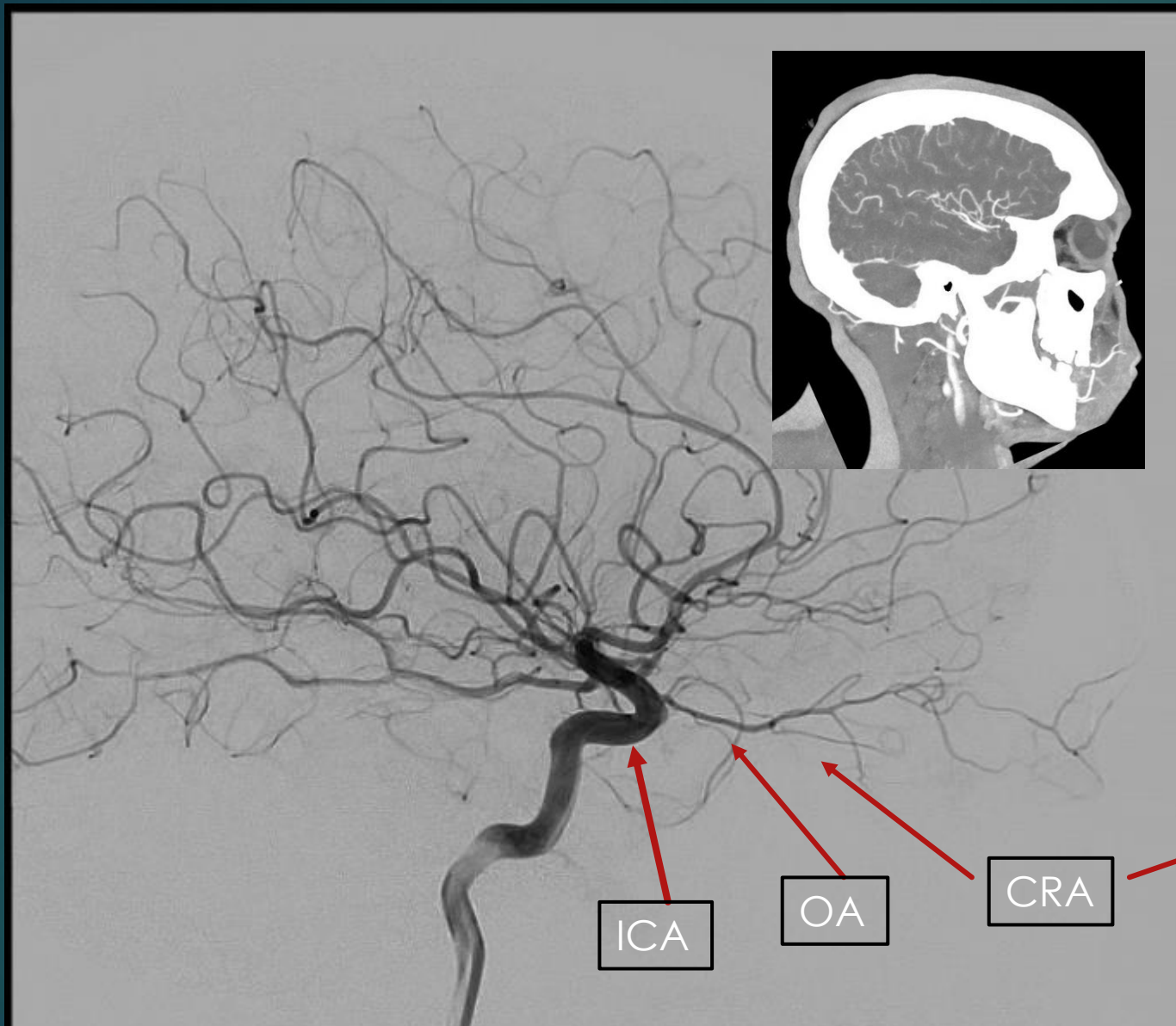


Fundoscopic Photography

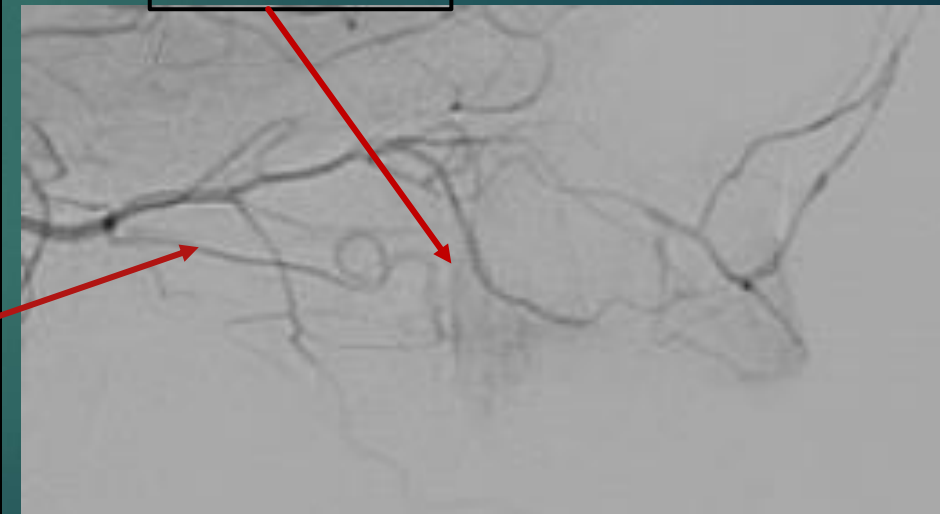


Acute Treatments

Treatment	Efficacy	
Ocular massage		<p>Lack evidence and possible harm so not part of any guidelines</p>
Anterior chamber paracentesis		
Hemo-dilution		
Hyperbaric oxygen		
Acetazolamide		
Alteplase	~50-55% recovery	LKW less than 4.5hr
Tenectopase	? Similar to tPA/better	LKW less than 4.5hr
Intra-arterial Alteplase	? Not enough evidence	? LKW less than 6.0hr Case by case
No treatment	~17% recovery	

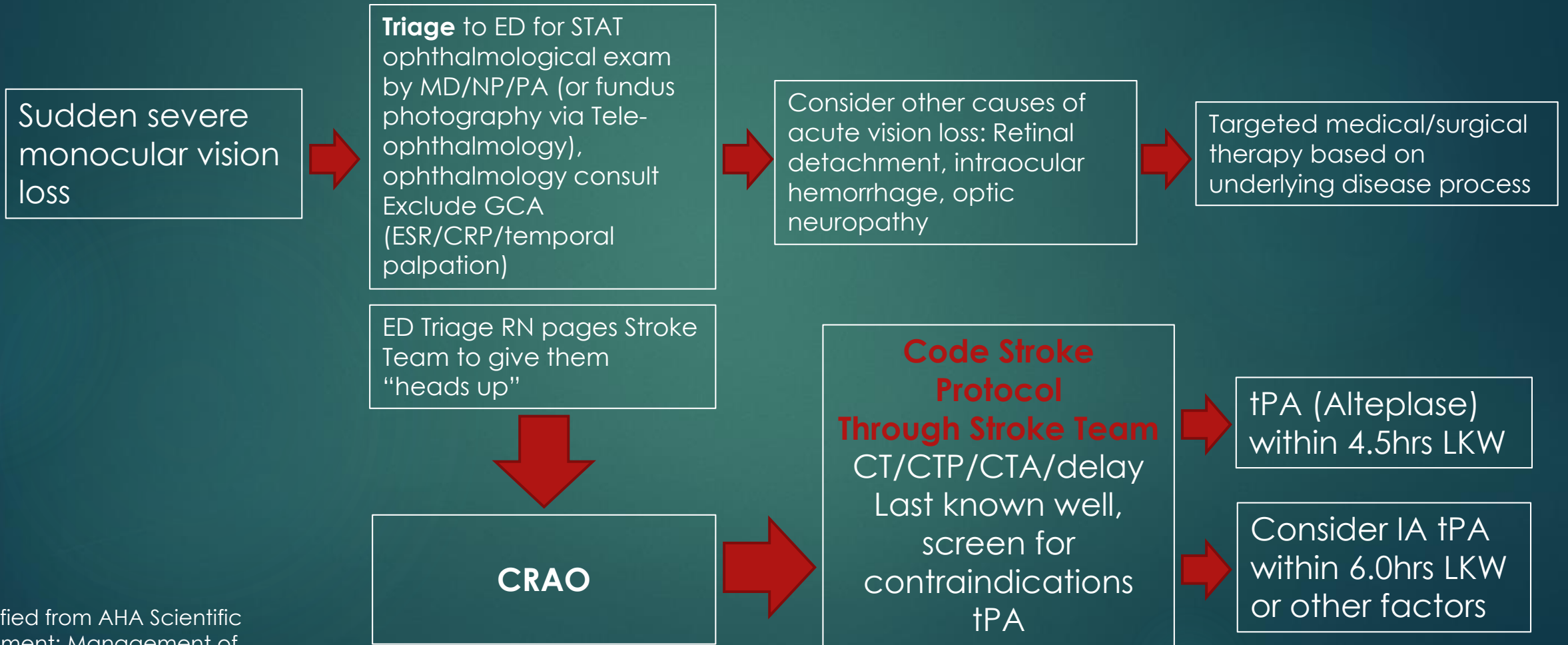


Choroid Blush



Treated with IA tPA 13hr after LKW time. Improvement in vision post procedure – now 20/30 6mo later!

Care Algorithm



Pearls!



**TRIAGE:
Monocular
or Both?**

Time is Brain/Eye