

Stroke Video Triage Newsletter



Welcome to the second edition of The Stroke Video Triage Newsletter. In this edition, we will be looking at safety monitoring.
A few updates to start with:

Stroke Video Triage audit: A 2 week audit was carried out at Queens Hospital, Romford which looked at every stroke patient who arrived at ED by East of England Ambulance Service. There were 13 cases, stroke video triage was utilised for 7 of these cases. Where SVT wasn't used, there was a justifiable reason i.e. out of area crew who weren't trained or the patient was unresponsive (reduced GCS). Another 2 week audit will be carried out at Queens Hospital, Romford and also at Peterborough City Hospital as this is a useful way of reviewing the utilisation of our stroke video triage pathway.

Direct to CT at Queens, Romford: We had a patient enrolled on our direct to CT pathway, the crew were on scene with the patient for 16 minutes and 51 seconds. The patient was transported to Queens Hospital Romford, and receiving a CT scan within 13 minutes of arrival, and was thrombolysed within 20 minutes of arrival. Sadly the patient did not survive to discharge, however the patient was given the best opportunity to recover from their stroke, by the rapid actions of the crew and the hospital on the patients arrival.

Expansion Update: We are still working with a number of hospitals across the East of England region who are looking to implement stroke video triage.

Safety Monitoring: Every week we undertake clinical case reviews of **all** patients who are video triaged. We identify patient outcomes to ensure safety. In the next newsletter we look forward to sharing these results with you!

Stroke Video Triage training: The training package is located on your iPads under "stroke video triage training". Any questions or issues please email Andrew.Larby@eastamb.nhs.uk

Stroke Training: Monthly CPD training is being setup for stroke across the East of England region, keep an eye on Need to Know for details on how to join.

Safety Monitoring:

As part of the safety of stroke video triage, every patient who is video triaged is audited the following week. During this clinical case review, we review the EPCR, the patients documentation of their care during their hospital admission, any brain imaging and the final discharge diagnosis. This month we will share the safety monitoring for Peterborough City Hospital.

As you can see from the first table below, to date there have been no missed Stroke's. All patients where a mimic was suspected (33) have all been mimics.

Of the 46 cases where stroke was the primary working diagnosis, 35 were confirmed Stroke, 7 were mimics and 4 were TIA's.

This gives stroke video triage a 100% sensitivity and 82.5% specificity, and a comparison to FAST is offered below.

Final Diagnosis				
Video Triage Impression		Stroke	Mimic	TIA
	Stroke	35	7	4
	Mimic	0	33	0
	TIA	1	0	4

Stroke Video Triage	Sensitivity: 100%	Specificity: 82.5%
FAST (Zhelev et al, 2019)	Sensitivity: 64%-97%	Specificity: 13%-92%

Case Study 1

Patient: 25 year old female, ? Stroke (details pseudonymised to protect confidentiality)

PMH: Nil.

History: Patient noticed a twitch in her left eye last night, and this morning woke up with facial numbness down left side. Throughout the morning her left eye became sluggish and her pupil became dilated, she then noticed a right sided facial droop, and struggled to smile properly. The patient rang her GP as had some concerns even though she felt well with no other symptoms, and they advised patient to call for ambulance.

Shx: Independent,

Dhx: No regular medication

On Examination:

DRCABC: No concerns.

FAST: Right sided facial droop, unable to smile fully, unable to puff cheeks out, left sided eye sluggish on blinking and closing compared to right side. No limb weakness, no slurred speech, no other focal neurological deficit.

Crew impression: FAST +ve, so contacted stroke video triage. Crew queried Bells Palsy. Stroke video triage team assessed patient over FaceTime. Likely presentation of Bells Palsy, however due to eye twitching and neurological deficit requires further assessment at ED. Patient able to be transported to nearest ED rather than bypassing to go to nearest HASU.

Outcome: Bells Palsy. Patient discharged from ED.

Bells Palsy

What is Bells Palsy?

Bells Palsy involves swelling adjacent to the facial nerve as it passes through the skull base into the ear. Compression of this nerve can stop the muscles that it supplies from working. The cause of the swelling is not known.

How is Bells Palsy Managed?

Steroid tablets (usually prednisolone) help to reduce inflammation and are normally taken for 10 days. To ensure maximum benefit, the steroid tablets should be started within three days of the facial weakness appearing. If the eyelid cannot shut completely, the surface of the eye may dry up and be harmed. In addition, the tear ducts may not function temporarily, which could dry the eye further. Treatment is needed to keep the eye moist. This normally involves frequent lubricating eye drops during the day. At night, eye ointment can be applied before closing the eye shut with tape.

Prognosis?

Most studies indicate that if a steroid is not prescribed, 7 of 10 patients will recover completely. If a steroid is taken, 8 of 10 patients will recover completely. Most patients will note an improvement in their facial weakness within 3 weeks, with the remainder resolving by 3 to 5 months (Masterson et al., 2015).