Subarachnoid hemorrhage (SA) occurs in 1% of headache patients in the ED. CT is first line to detect it, but the sensitivity was variable and decreased the longer the patient waited to have a CT read. If CT was negative, a lumbar puncture was used to be sure.

Is CT alone sensitive enough to catch subarachnoid hemorrhage?

Study Design

Prospective cohort at 11 tertiary care hospitals
Patients presented with acute non-traumatic headache or headache and syncope. All patients had a GCS of 15
Qualified blinded radiologists interpreted all CT scans

Results

The timer starts at the onset of the patient's symptoms (not when they arrive in the ED!)

CT Report Read <6 Hours
CT Report Read >6 Hours

Identified (100%)
Mixed (13.82%)
Identified (82.93%)
Mixed by ED Physician (3.25%)

BOTTOM LINE

IF a CT is read by a qualified radiologist <6 Hrs from symptom onset

CT is sufficiently sensitive to detect subarachnoid hemorrhage

REFERENCES:

This infographic was created by Lauren Beals and edited by Alvin Chin.