

# AUDIT ON TIMING OF BRAIN IMAGING IN THE POST-RESUSCITATION CARE OF PAEDIATRIC PATIENTS FOLLOWING CARDIAC ARREST

Chinedu Orazulume <sup>1</sup>

<sup>1</sup> Health Education East Midlands, United Kingdom

## BACKGROUND

Following cardiac arrest, brain imaging in the post-resuscitation care period is vital for diagnostic and neuro-prognostication purposes.

The Standard audited is the "Post-Cardiac Arrest Brain Imaging Timing Guideline" of a UK Children's Hospital.

### Post-Cardiac Arrest Brain Imaging Timing Guideline:

1. CT Brain as soon as possible.
2. MRI Brain between 2nd- 5th day, ideally on the 3rd day post-arrest.

**Aim:** To measure compliance for brain imaging timing in the post-resuscitation care of paediatric patients following cardiac arrest

## METHOD

Retrospective data collection from the medical records of patients who were alive following a paediatric cardiac arrest call in a 20-month period from February 2020 to September 2021 in a UK hospital. The arrest calls were reported to the hospital's incident reporting system.

### Audit Inclusion Criteria:

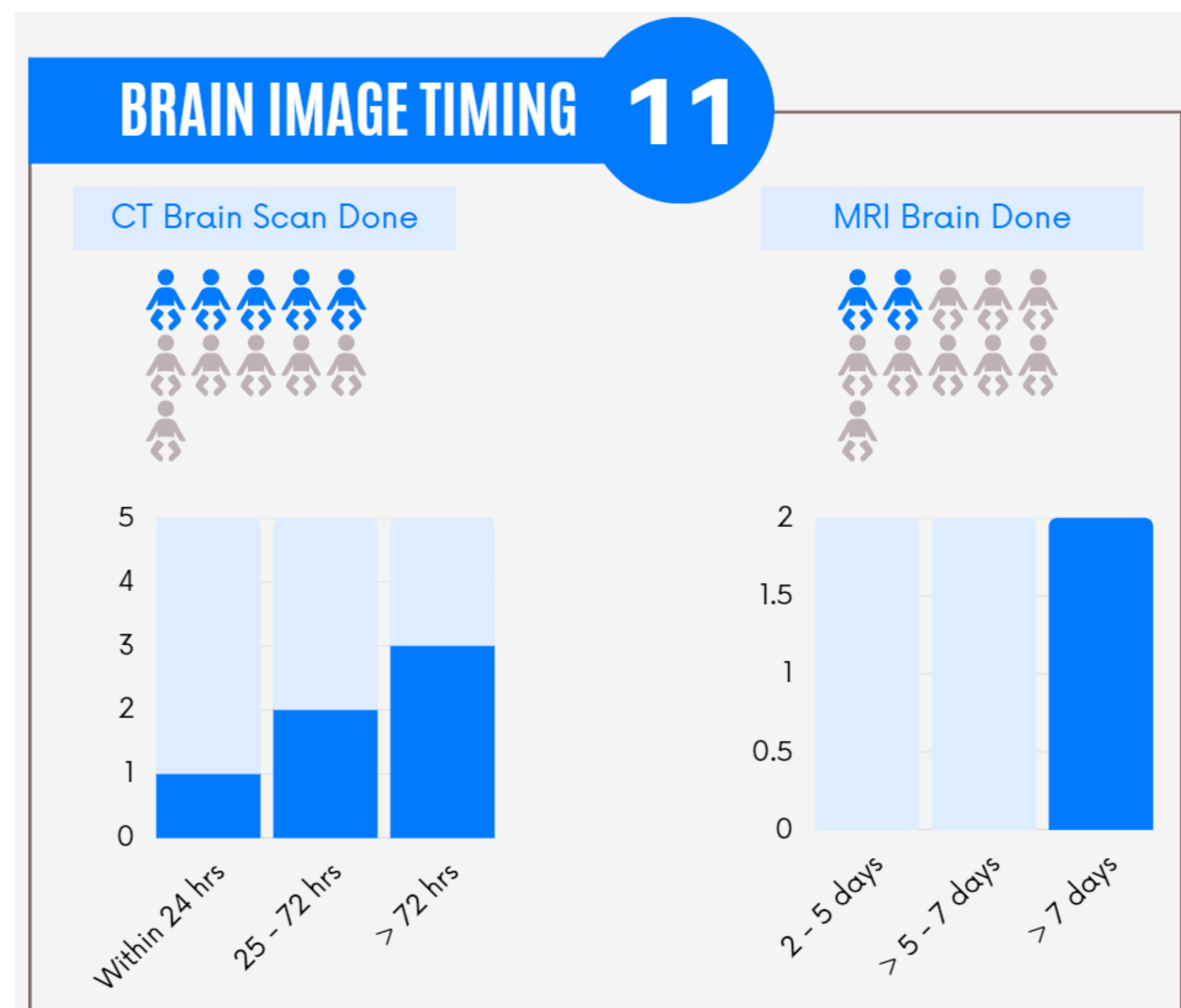
1. Less than or 16 years old.
2. Cardio-pulmonary resuscitation (CPR) for 3 or more minutes and required CPR drug and/or shock

## DISCUSSION AND CONCLUSION

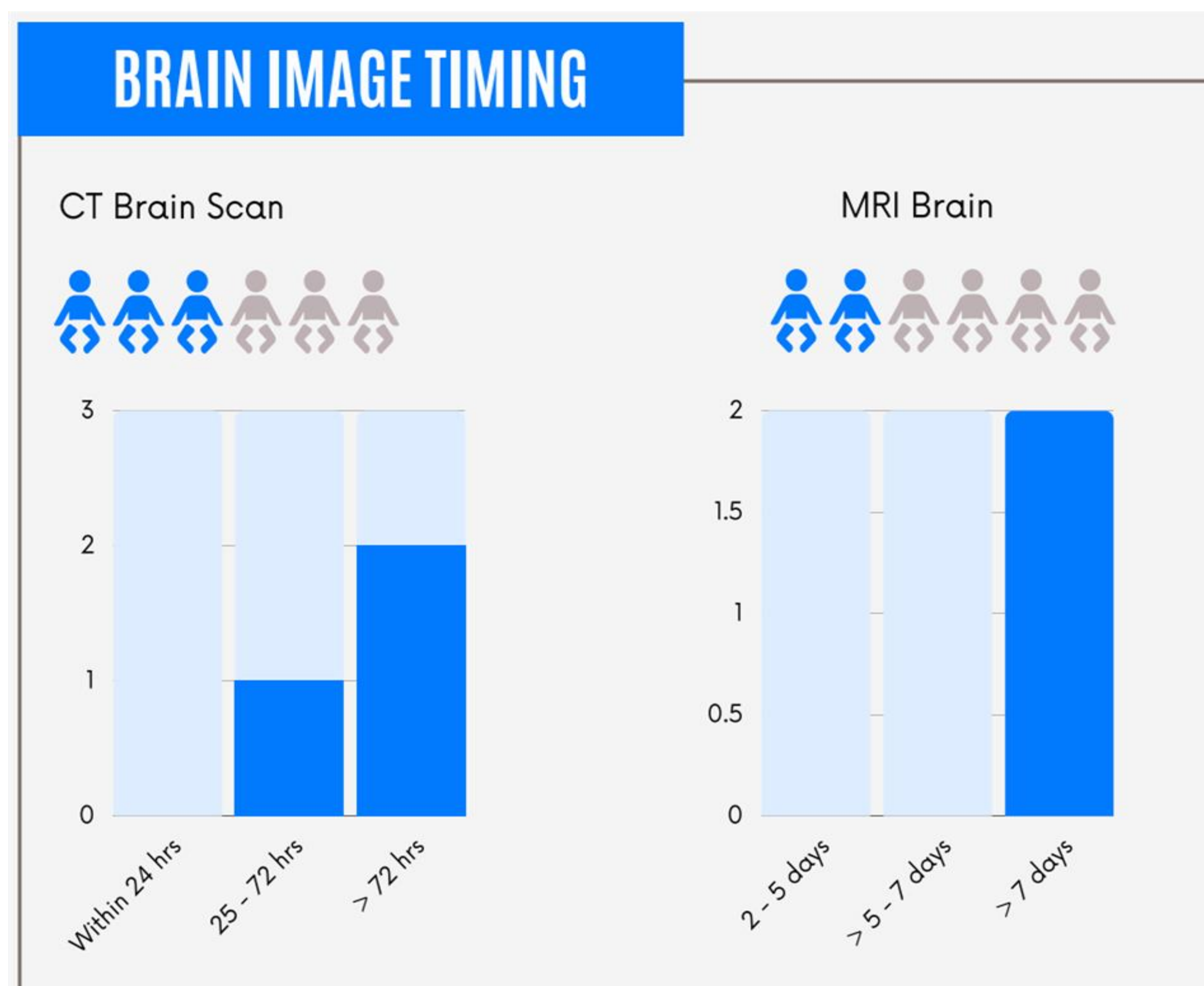
With consideration given to patients who went down the palliative care route, there was still less than 100% compliance in offering Brain scans to patients in their post-resuscitation care period, and less than 100% compliance for MRI brain timing in those who received MRI Brain Scan.

## RESULTS

28 patients were alive following the arrest call. 11 met audit criteria. See Figure 1 and Figure 2 for result details.



**Figure 1:** 11 patients met audit criteria. Only 45% (5) received CT Brain, and 1 had a CT Brain scan twice. Only 2 (18%) received MRI Brain



**Figure 2:** Brain imaging timing in patients who did not go down the palliative care route. 6 patients out of 11 did not have their care reorientated to palliative care. 50% (3) received CT Brain, and 33% (2) received MRI Brain.