NHS
Blood and Transplant

Organ Donation Simulation Course
SIM Scenarios

Scenario 1: DCD

12-week-old boy was found unresponsive in his cot by his mother. He was given CPR by a family friend approximately 5 minutes after being found. On arrival, the paramedic team confirmed he was in asystolic arrest, RoSC occurred after 2 cycles of CPR. He was initially transferred to a local DGH.

He has now been transferred to PICU.

Since admission to PICU:
The child has been neuro-protected for 72 hours. Neurological assessment reveals response to painful stimuli with occasional respiratory effort on the ventilator. CT head and subsequent MRI demonstrate findings consistent with a global severe hypoxic ischaemic injury affecting the white and deep grey matter. After an MDT meeting involving the Paediatric Intensive Care and Neurology teams it is felt that these findings are consistent with a devastating brain injury that is not survivable and consideration of withdrawl of life sustaining measures would be appropriate.

Candidate Tasks:

1: Notification to the SNODs by telephone

2: Breaking bad news: Informing the family of the results of the scans and the MDT meeting - with the SNOD.

3: Collaborative approach to OD with the family – supporting SNOD in donation discussions (family consent to OD) (Scenario led by SNOD)

4: Explanation about the process of OD to family – including WLST, and confirmation of circulatory death, transfer to theatre and what happens if there is a delay in asystole

Feedback: at end of each task

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Scenario 2: DBD

A 6-year-old boy presented to local DGH with a history of out-of-hospital cardiac arrest, following a fall into a lake. He was found by his father who called 999 and commenced CPR. The paramedic crew arrived 15 minutes later to find him unresponsive and asystolic. They continued CPR, and on arrival in ED 15 minutes later he remained asystolic with a core temperature of 28°C. He was intubated and following a 2nd dose of Adrenaline, he had ROSC.

Secondary Assessment revealed:
- Blood gas: pH 6.8, BE -22, Lactate 8
- Pupils dilated but reactive to light
- No other injuries
- An initial CT Head showed loss of grey- white matter differentiation, with loss of the basal cisterns, small CSF spaces but evidence of a bleed

The PICU team were called and he was accepted for transfer

Whilst on the PICU the patient continued to receive neuroprotective measures, however at 24 hours into the PICU stay he became bradycardic and hypertensive, both pupils noted to be fixed and dilated. Urgent CT scan showed no bleed, worsening of the grey white matter differentiation and evidence of transtentorial and tonsillar herniation. Pupils remained fixed and dilated despite medical measures.

Candidate Tasks:

1: Notification to the SNODs by telephone

2: Inform the family that the patient is suspected to be neurologically dead, and explain the tests that need to be carried out with the SNOD

3: Prepare equipment required and carry out testing according to the guidelines, ensuring all pre-conditions for the determination of neurological death have been met. Complete the necessary paperwork to confirm testing

4: Explain the results to the parents with the SNOD, approach the subject of OD with the family

Feedback: at end of each task