NHS Blood and Transplant

Donation after Circulatory Death Masterclass

"Giving more of your patients the option of donation"

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"Improving organ donation within your hospital"

Case Studies in DCD

- In your table groups we would like you to discuss the two case studies assigned per table, and consider solutions to the questions asked under each case
- You will have 10 minutes to read the case studies and think about and develop your answers to the questions asked
- We will then ask 5 tables to feedback on their group discussions. Group feedback will be 5 minutes per group
- In total the session will run for 40 minutes
- You have copies of the case studies in your delegate bags and in the slides provided
- You have an expert in DCD at each table as well as a facilitator to support your discussions

Case Study 1: Complaint

Three months ago a 28 year old, previously healthy, female patient suffered an out of hospital cardiac arrest due to a massive pulmonary embolus. Following a prolonged period of resuscitation, she was admitted to your intensive care for further management. On the third day of admission, examination revealed the presence of fixed dilated pupils, extensor responses to painful stimuli, and she was breathing spontaneously and receiving 70% O_2 by CPAP mode.

Following discussion with her family, a decision was taken to withdraw treatment as the clinicians involved, and her family, felt further management was not in the patients best interest. Her parents had stated that she was on the organ donor register and were keen that she become an organ donor. Your colleague on duty told them that this was not an option as she was not brainstem dead and he did not wish to prolong ICU treatment. Donation was not considered any further, and the patient died later on that day. Her family have submitted a written complaint to the Chief Executive of your Trust over the handling of their request for organ donation. The Chief Executive has asked for your response.

1. Was this complaint justified
2. How should you respond to this complaint
3. How should the Trust react to the failure of the clinician to support donation in this case?

Case Study 2: Withdrawal of life-sustaining treatment

An ICU caring for a potential DCD donor has no formal policy for withdrawal of cardiorespiratory support, and indeed, there is considerable variation among the consultant staff on this aspect of end of life care.

The clinician in charge of the care of a potential DCD donor has declared that he intends to manage the withdrawal of care by:

a) Commencing intravenous infusions of midazolam and fentanyl

b) Extubating the patient when preparations for organ retrieval have been completed, and

c) Giving an instruction that once extubated, the patient should remain supine and that any apparent distress be treated with further boluses of sedation and /or opioid.

The nurse caring for the patient is relatively inexperienced, and has not been involved in DCD before. She expresses some anxiety to the nurse in charge of the unit that this aspect of end of life care represents euthanasia.

1. Can DCD donation occur in the absence of a formal policy on withdrawal of treatment?
2. What issues should a policy on withdrawal of support address?
3. What are the difficulties in implementing such a policy?
4. Do you agree on the management plan described by the consultant?
5. Who should accompany the patient to theatre, and what are their responsibilities?

Case Study 3: Potential brainstem dead patient?

A 68 year old patient presents with collapse and loss of consciousness. A CT scan reveals a subarachnoid haemorrhage and the presence of cerebral atrophy. He is intubated and ventilated and admitted to ICU. His pupils become fixed and dilated, but he is still coughing and breathing spontaneously. Consent is obtained from his family for donation after circulatory death. However, during the evening, whilst the retrieval team are travelling to the donating hospital, the patient becomes hypotensive and apnoeic. There has been one previous DCD donor from this hospital. The consultant is on call from home and only willing to give telephone advice.

1. Should the patient be resuscitated to perform brainstem tests?
2. Should the family be given the option of donation following brainstem death?
3. Was the consultant's response appropriate?
4. What is the role of the ICU consultant in the management of the potential DCD donor?

Case Study 4: Medical Interventions

A 21 year old male has suffered a catastrophic brain injury following a climbing accident.

His pupils are fixed and dilated, but it is felt unlikely that he will progress to brainstem death as he had suffered a traumatic decompressive craniectomy, there is persistent CSF leakage and extrusion of brain tissue through the skull defect. He has also suffered chest injuries, including multiple rib fractures, and a significant myocardial contusion.

The patient is on the organ donor register and his family is very keen for donation to take place.

He develops clinical signs consistent with a tension pneumothorax whilst arrangements for organ retrieval are still being made, and a peri-arrest situation develops very quickly.

1. Is it appropriate to treat the suspected tension pneumothorax?

2. If he developed dysrhythmias as a result of his myocardial contusion, would you treat them?

3. If his endotracheal tube became dislodged, would it be appropriate to re-intubate the patient?

4. Would it be appropriate to re-insert an arterial line if it became dislodged?

5. Are there any medical interventions that would not be appropriate to institute in the care of a potential DCD donor?

Case Study 5: Emergency Department

A 44 year old female with a past medical history of hypertension is admitted to a department of emergency medicine with a history of sudden onset headache followed by collapse. She has a GCS of 4 and bilaterally fixed pupils. She is breathing spontaneously through an endotracheal tube. A CT scan reveals subarachnoid haemorrhage, gross cerebral swelling and a large AV malformation arising from the midbrain. The local neurosurgical team, who have previously treated the patient, declares that there are no further treatment options and that sadly the patient has no chance of survival.

The clinical staff within the Department of Emergency Medicine are aware that their Trust ICU has a DCD programme, but have no programme within their department. After speaking to the patient's family, they refer her to the ICU team for help with facilitating this. The ICU is full, and in any event, the ICU has a policy not to admit patients in whom futility has been declared. Emergency Medicine is also very busy, and has several patients who will breach the 4 hour target if the staff looking after this patient are not released. Although two SNODs, one of whom is a very experienced ICU nurse who worked in this hospital, are on site, they are hesitant in taking over her care to help out with these logistical problems.

Case Study 5: Emergency Department

1. Where should this patient be cared for?
2. Who should be responsible for the management of this patient, in order to maximise their donor potential?
3. How could the SNOD contribute to the management of this patient?
4. Could donation take place in the Emergency Department in your hospital?
5. Are treatments that support donation necessarily futile?