Guidelines Paediatric Haematology/Oncology patients with acute deterioration after Central Venous Line flush at home or in hospital

If a patient becomes acutely unwell or collapses after a Central Venous Line flush overwhelming sepsis is the most like cause. This SOP covers patients who:

- Become unwell after a line flush.
  - Rapid onset flushing, vomiting, headache, increase in heart rate and raised temperature are all signs of bacteraemia/septicaemia
  - In addition the patient may develop low blood pressure, cyanosis and become unresponsive

- All parents should be educated about these signs of line sepsis so that they know to seek urgent medical attention by calling 999 if their child develops any of the above symptoms if the health professional who flushed the line is no longer present. NOTE the ward should also be informed

Standardised Operating Procedure:

- Paediatric Oncology Outreach/Community Nurse dial “999” to request ambulance immediately to take patient from home to Local Hospital Emergency Department (ED) and to stay with patient until ambulance arrives.
- Nurse to also inform Local Ward team so that they can meet the patient in ED
- Ensure Ambulance team call ahead to Hospital ED

**Transfer to Hospital ED Resuscitation Bay:**

- DO NOT TRANSFER PATIENT TO PAEDIATRIC WARD as emergency treatment is needed in an ED setting

- Prior to patient’s arrival in ED Resus Bay acquire MEROPENEM OR CIPROFLOXACIN if penicillin allergic:
  - ED Resus team to collect Meropenem from store
  - OUH: can collect from PICU or Kamran’s Ward
  - POSCU: Identify storage site ..............................

- On patient’s arrival in ED:
  - Contact Senior member of Paediatric or PICU team and Oxford Haematology Oncology consultant on call
  - Remember AIRWAY, BREATHING, CIRCULATION
- Aspirate central line for blood cultures, FBC, U and E’s and Venous Gas
- **If the patient is shocked the priority is to give resuscitation fluids. Ideally this should be through a peripheral cannula to avoid further septic showers but this may not be possible and hickman line will have to be used.**
- Consider Interosseus needle for resuscitation to avoid use of Hickman Line to minimise further septic showers
- Commence antibiotics as per febrile neutropenia guideline. Meropenem (40mg/kg/dose tds, max. 2g tds)
- If allergic to meropenem give ciprofloxacin 10mg/kg/dose tds (max. 400mg)

### Review

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<thead>
<tr>
<th>Name</th>
<th>Revision</th>
<th>Date</th>
<th>Version</th>
<th>Review date</th>
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<tbody>
<tr>
<td>Dr Shaun Wilson, Paed Oncology Consultant</td>
<td>New doc</td>
<td>Dec 2015</td>
<td>1.0</td>
<td>Dec 2017</td>
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<tr>
<td>Dr A Qureshi, Paed Haem/Onc Consultant</td>
<td>Title and Filename changed (Previously Collapse in community) Major process update</td>
<td>April 2016</td>
<td>2.0</td>
<td>April 2018</td>
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