Acute Oncology: An App for Healthcare Professionals

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Deaths After Chemotherapy

35%  57%
2009: Acute Oncology

- Emergency admissions of patients with cancer
- In all hospitals in England
## Acute Oncology Workload

<table>
<thead>
<tr>
<th>Tumour Group</th>
<th>Total</th>
<th>Median LoS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haem Onc</td>
<td>3626</td>
<td>6</td>
</tr>
<tr>
<td>Lung</td>
<td>3547</td>
<td>6</td>
</tr>
<tr>
<td>Hepato-Pancreato-Biliary</td>
<td>1682</td>
<td>7</td>
</tr>
<tr>
<td>Colorectal</td>
<td>1672</td>
<td>8</td>
</tr>
<tr>
<td>Gynaecological</td>
<td>1632</td>
<td>3</td>
</tr>
<tr>
<td>Brain/CNS</td>
<td>1599</td>
<td>6</td>
</tr>
<tr>
<td>Urological</td>
<td>1190</td>
<td>6</td>
</tr>
<tr>
<td>Upper Gastrointestinal tract</td>
<td>1187</td>
<td>7</td>
</tr>
<tr>
<td>Sarcoma</td>
<td>973</td>
<td>8</td>
</tr>
<tr>
<td>Breast</td>
<td>905</td>
<td>5</td>
</tr>
<tr>
<td>Head &amp; Neck</td>
<td>584</td>
<td>6</td>
</tr>
<tr>
<td>Other/Unqualified</td>
<td>408</td>
<td>8</td>
</tr>
<tr>
<td>Skin</td>
<td>282</td>
<td>4</td>
</tr>
<tr>
<td>Thyroid/Endocrine</td>
<td>132</td>
<td>5</td>
</tr>
<tr>
<td>Eye</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>19438</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

17 Trusts within London Cancer Alliance 2011/12

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**Chart et al., 12th Annual British Thoracic Oncology Group Conference, Dublin, 2014**
# Challenges of Acute Oncology

## Measure Number and Short Title

<table>
<thead>
<tr>
<th>Measure Number and Short Title</th>
<th>PR (183 teams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-3Y-101 - The Acute Oncology Team</td>
<td>40%</td>
</tr>
<tr>
<td>11-3Y-102 - Acute Oncology Induction Training for A&amp;E Staff</td>
<td>13%</td>
</tr>
<tr>
<td>11-3Y-103 - Acute Oncology Induction Training for Staff on the Acute Medical Take Rota and Medical Admissions Unit</td>
<td>14%</td>
</tr>
</tbody>
</table>

## Table: 2011-2012 and 2012-2013

<table>
<thead>
<tr>
<th>Service</th>
<th>2011-2012</th>
<th>2012-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IR 11/12</td>
<td>SC 11/12</td>
</tr>
<tr>
<td>Acute Oncology (i)</td>
<td>15 (8%)</td>
<td>50 (27%)</td>
</tr>
<tr>
<td>Specialist Acute Oncology (ii)</td>
<td>0 (0%)</td>
<td>3 (21%)</td>
</tr>
<tr>
<td>General Acute Oncology (iii)</td>
<td>15 (8%)</td>
<td>54 (28%)</td>
</tr>
<tr>
<td>Acute Oncology Inpatient Assessment</td>
<td>15 (8%)</td>
<td>52 (27%)</td>
</tr>
</tbody>
</table>
Aims of Acute Oncology App

- Promote best, evidence-based practice
- Minimise variation between hospitals
- Improve communication between teams
- Reduce unnecessary investigations
- Improve patient care
3. Central Venous Access Device Complications

If central venous access device complications suspected, please refer to Acute Oncology Service.

Indicating central venous access device (CVAD), e.g., central venous line, is required for the safe release of chemotherapy, growth factors, and other pharmaceuticals. The CVAD is inserted temporarily through a peripheral access to the patient. The CVAD must be changed when the catheter is damaged, or the line becomes blocked.

The catheter tip should be removed before the central venous access becomes infected. The infection should be treated with antibiotics to prevent any further complications.

3.1. Types of CVAD

3.1.1. Implantable Ports (Portacaths)

Ports should only be accessed with an appropriate needle for care and treatment.

A port should not be accessed until the needle is seen in the port. If the needle is not visible, it should not be accessed.

3.1.2. Use of Implantable Catheters (Biomedex

Catheters should be used with aseptic technique and sterile gloves while accessing the catheter.

4. Diarrhea, Chemotherapy and Radiotherapy-Induced

If diarrhea occurs, refer to the Acute Oncology Service.

Patients receiving chemotherapy or radiotherapy for the treatment of cancer or other medical conditions may experience diarrhea as a side effect of the treatment. Diarrhea can be acute or chronic, depending on the duration and severity.

Diarrhea is a common side effect of chemotherapy and radiotherapy, occurring in approximately 50% of patients. It can be severe and may require hospitalization.

Diarrhea is usually mild and can be managed with hydration and simple dietary changes. However, severe diarrhea can lead to dehydration and electrolyte imbalances, which can be life-threatening if left untreated.

Patients who experience diarrhea should be monitored closely, and their symptoms should be managed promptly. Diarrhea should be reported to the Acute Oncology Service immediately.

4.1. Preventing Diarrhea

4.1.1. Frequency of Diarrhea

Frequency of diarrhea should be recorded, and the treatment plan should be adjusted accordingly.

Diarrhea can be prevented by maintaining good hygiene, following a healthy diet, and avoiding medications that may cause diarrhea.

4.1.2. Use of Probiotics

Probiotics may be used to help prevent and treat diarrhea. However, they should not be used as a substitute for other treatments.

Patients should follow a healthy diet and avoid medications that may cause diarrhea.

5. Neuroendocrine Symptoms

If neuroendocrine symptoms are suspected, please refer to Acute Oncology Service.

5.1. Introduction

Neuroendocrine tumors (NETs) are rare but often asymptomatic. They can cause symptoms such as flushing, diarrhea, and bradyarrhythmia.

Neuroendocrine symptoms can be divided into two types: mild and severe.

Mild symptoms include flushing, diarrhea, and bradyarrhythmia.

Severe symptoms include abdominal pain, nausea, and vomiting.

5.2. Prevention

5.2.1. Fluorodeoxyglucose-Positron Emission Tomography (FDG-PET)

FDG-PET can help detect NETs and assess their activity.

5.2.2. Somatostatin Analogues

Somatostatin analogues can be used to manage neuroendocrine symptoms.

5.3. Treatment

Treatment options include surgery, chemotherapy, and medical management.

Surgery can be used to remove the tumor and control symptoms.

Chemotherapy can be used to treat advanced cases of NETs.

Medical management includes the use of somatostatin analogues, glucagon-like peptide-1 (GLP-1) receptor agonists, and other medications.
Skin Tunnelled Catheters ('Hickman Lines')

Diagram showing a central line. Copyright © CancerHelp UK.

Connection for drips or syringes

Collar bone
Point where central line enters body

Heart

Peripherally Inserted Central Catheters (PICCs)

Management

Grade 1

Grade 2

- 5g (20mmol) magnesium sulphate (MgSO₄) in 500ml normal saline over 6–8 hours.
- Oral Mg supplementation may be tried but is usually poorly tolerated due to diarrhoea.

Grade 3 or 4

If Hypocalcaemic

If Hypokalaemic
Acute Oncology Downloads

Total Downloads: 2065

Apr 2014 → To Date

Wessex Downloads: 286

Jan 2016 → To Date
Active Users per month
Sessions per month
Total time spent in the App per month
Availability and Dissemination

- Android and iPhone versions
- Free to all hospitals in South and West London
- Available to buy
- Local version licensed to Wessex

- Working on pan-London roll-out
- Aim for national availability
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For more information or to obtain the Acute Oncology app contact:

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