Systemic Anti-Cancer Treatment (SACT) Hypersensitivity Guideline

Reference Number:
NHSCT/12/518

Target audience:
This document is aimed at all clinical staff involved in the management of adult patients who develop a hypersensitivity reaction to SACT

Sources of advice in relation to this document:
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N/A

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Approved by:
Policy, Standards and Guidelines Committee

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NHSCT Mission Statement
To provide for all the quality of services we would expect for our families and ourselves
Management of Systemic Anti-Cancer Treatment (SACT) Hypersensitivity Guideline

(Adopted NIcAn Guideline)

January 2012
Guideline for the Management of Systemic Anti-Cancer Treatment (SACT) Hypersensitivity (NICaN)

1. **Introduction:**
   Systemic Anti-Cancer Treatment (SACT) related hypersensitivity can occur with any SACT but is most commonly seen with platinums, taxanes and targeted agents. Different patterns of reaction occur with different drugs in that most taxane reactions occur during the first treatment whereas repeated exposure to platinums result in increased risk of hypersensitivity. However, the same principles of acute management apply.

   The following guidelines relate to the management of SACT related hypersensitivity reactions. They should be used in conjunction with local policies and guidelines in the treatment of anaphylactic reactions.

   For further guidance on management of infusion related effects or hypersensitivity reactions please consult an up-to-date Summary of Product Characteristics (SPC) via the electronic medicines compendium [http://emc.medicines.org.uk](http://emc.medicines.org.uk) or relevant chemotherapy prescription sheet.

2. **Purpose:**
   To ensure a safe, standardised approach to the assessment and initial management of adult patients with hypersensitivity reactions to SACT. Clinicians managing patients with hypersensitivity reactions to SACT will not always have an extensive knowledge of SACT; hence there is a need to ensure consistency of practice.

3. **The Scope/Target Audience:**
   This document is aimed at all clinical staff involved in the management of adult patients who develop a hypersensitivity reaction to SACT.

4. **Objectives:**
   1. To provide support to health care professionals in the recognition and initiation of prompt and appropriate clinical management of patients who have a hypersensitivity reaction to SACT.
   2. To ensure a unified approach to initial hypersensitivity to SACT management across Northern Ireland.

5. **Roles and Responsibilities:**
   It is the responsibility of all those involved in the management of patients receiving SACT to familiarise themselves with the content of these guidelines. This includes staff in oncology and haematology treatment units, staff who administer SACT in the patient’s home and those who provide medical support for these patients.
6. **The definition and background of the guideline:**
SACT can be associated with hypersensitivity reactions, which can range in severity from minimal symptoms to anaphylaxis. Optimal management requires prompt recognition and appropriate management.

7. **Guideline description:**
While there is a spectrum of severity of reactions, for the purpose of management it is best to classify reactions as **mild, moderate or severe**. The classification will depend on the nature and duration of signs and symptoms.

**Prevention is better than cure; therefore ensure the appropriate pre-medication has been given where indicated.** If the patient has had a previous hypersensitivity reaction maximal pre-medication should be administered and the rate of infusion should be adjusted (refer to the SPC of the particular agent). Patients should have medicines reconciled to highlight any concurrent medicines that may contribute to infusion related events or complicate the treatment of hypersensitivity.

Appropriate intervention is based on the assessment of severity (see flow chart).

**Nursing staff should contact the appropriate member of medical staff but in the event of severe reactions should institute immediate therapy with 100% oxygen, intra-muscular adrenaline (epinephrine), IV fluids, Chlorphenamine and Hydrocortisone as per anaphylaxis policy.**

If patients who have previously reacted are being re-challenged, this should be undertaken and completed between 9am and 5pm with an anaphylaxis kit beside the patient. Emergency resuscitation equipment and personnel should be available during the re-challenge period.

The patient’s consultant must be informed if there is a moderate or severe reaction, so that a decision can be made regarding re-challenge.
## Management of SACT Hypersensitivity

**Stop the SACT infusion immediately**
**Assess the patient - pulse, BP, respiratory rate and oxygen saturation**
**Call Medical Officer - do not leave patient unattended**

### Severity of Reaction

<table>
<thead>
<tr>
<th>Severity of Reaction</th>
<th>Symptoms &amp; Signs</th>
<th>Initial Management</th>
<th>Re-challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>Can include:</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Erythema/itch</td>
<td>Chlorphenamine 10mg intravenous bolus over 1 min</td>
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<tr>
<td></td>
<td></td>
<td>Hydrocortisone 200mg slow intravenous bolus</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>When signs and symptoms subside restart infusion at lower infusion rate</td>
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<tr>
<td>Moderate</td>
<td>As above and :</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Tachycardia</td>
<td></td>
<td>Do not re-challenge on that day</td>
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<tr>
<td></td>
<td>• Throat/chest tightness/pain</td>
<td></td>
<td>Reassess medically &amp; allow home if stable</td>
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<tr>
<td></td>
<td>• Abdominal/back pain</td>
<td></td>
<td>Warn patient of risk of relapse when drugs wear off</td>
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<td></td>
<td></td>
<td>Chlorphenamine 10-20mg intravenous bolus over 1 min</td>
<td></td>
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<td></td>
<td></td>
<td>Hydrocortisone 200mg slow intravenous bolus</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Consider Ranitidine 50mg intravenous in 20ml sodium chloride 0.9% over 2 min</td>
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<tr>
<td></td>
<td></td>
<td>Establish intravenous infusion of sodium chloride 0.9% until Medical Officer arrives</td>
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</tr>
<tr>
<td>Severe</td>
<td>As above and :</td>
<td></td>
<td>Consultant makes decision whether to re-challenge or not</td>
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<tr>
<td></td>
<td>• Hypoxia</td>
<td>100% Oxygen</td>
<td>Admit for observation</td>
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<tr>
<td></td>
<td>• Wheezing</td>
<td>500micrograms Adrenaline (Epinephrine) 0.5ml 1:1000 by deep intra-muscular injection – can be repeated every 5 mins in absence of clinical improvement</td>
<td>Assisted ventilation and ICU may be necessary</td>
</tr>
<tr>
<td></td>
<td>• Hypotension</td>
<td>Secure airway</td>
<td>Do not re-challenge on that day and if re-challenging, do so at a reduced rate after consulting the SPC</td>
</tr>
<tr>
<td></td>
<td>• Persisting and escalating symptoms</td>
<td>If hypotensive, lie flat and raise legs or if patient vomiting lie on their side</td>
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<tr>
<td></td>
<td></td>
<td>Establish intravenous infusion of sodium chloride 0.9% until Medical Officer arrives</td>
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<td>Hydrocortisone 200mg slow intravenous bolus</td>
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<tr>
<td></td>
<td></td>
<td>Ranitidine 50mg intravenous in 20ml sodium chloride 0.9% over 2 min</td>
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<td>Salbutamol 5mg nebuliser</td>
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</table>

*In the absence of clear evidence an observation period of 1 hour has been arbitrarily chosen*
• Adrenaline (Epinephrine) should be used in first instance for life threatening hypersensitivity reactions
  o Patients on tricyclic antidepressants are more prone to arrhythmia (use 50% adrenaline dose)

8. Policy statements:
8.1 It is essential that health care professionals recognize and initiate prompt and appropriate clinical management in patients who have a hypersensitivity reaction to SACT.

8.2 • All patients receiving SACT should be given verbal information on hypersensitivities and asked to report them as soon as they occur.
  • Patients receiving SACT that have regimen-specific prophylactic treatments should have these administered.
  • There should be monitoring of patients receiving SACT throughout the infusion for signs or hypersensitivity including; rash, flushing, light-headedness/feeling strange, nausea, breathlessness, wheeze, loin/abdominal pain or rapid/involuntary emptying of bowel and/or bladder.

9. Implementation / Resource requirements:
For circulation to all staff involved in the administration of SACT to adult patients throughout the Network (including private facilities / non statuary domiciliary providers).

Raise awareness locally with regards to the implementation of the guidelines.

10. Source(s) / Evidence Base:
• Group examined available literature and guidelines from other Cancer Networks.
• Discussion with multiprofessional staff who deal with patients.
• Discussion at Oncology Haematology Clinical Governance.

11. References, including relevant external guidelines:
  3. Pan Birmingham Cancer Network Guidelines for the management of allergic reactions and anaphylaxis during and following treatment with anti-cancer drugs.

12. Consultation Process:
Through the auspices of Northern Ireland Cancer Network Systemic Anti-Cancer Therapy Group which has widespread membership.
13. **Equality, Human Rights and DDA**
The guideline is purely clinical/technical in nature and will have no bearing in terms of its likely impact on equality of opportunity or good relations for people within the equality and good relations categories.

14. **Alternative Formats**
This document can be made available on request on disc, larger font, Braille, audio-cassette and in other minority languages to meet the needs of those who are not fluent in English.

15. **Sources of advice in relation to this document**
The Policy Author, responsible Assistant Director or Director as detailed on the policy title page should be contacted with regard to any queries on the content of this policy.