NEUTROPENIA – NOT SEPTIC

Cross references (including NSW Health/ SESIAHS policy directives)

ISLHD HAEM CLIN PD01 Neutropenia: Care of patient with SGSHHS CLIN003 Febrile Neutropenia – Initial management of patients with suspected or established neutropenic fever
SGSHHS CLIN148 Blood and Blood Product Administration
PD2010_058 Hand Hygiene Policy

1. What it is

A document that provides guidelines for the management of patients within SGSHHS with established neutropenia WITHOUT a fever

2. Employees it applies to

Medical Officers and nursing staff responsible for the care of patients within SGSHHS

3. When to use it

When an inpatient within SGSHHS has an absolute neutrophil count (ANC) of <1.0x10^9

4. Why the rule is necessary

To outline the necessary care appropriate for inpatients within SGSHHS with an ANC <1.0x10^9 with a view to identifying early signs of sepsis

5. Who is responsible

All nursing staff within SGSHHS responsible for the care of a neutropenic patient

6. Process

Neutropenia - an absolute neutrophil count (ANC) of <1.0x10^9. To determine the ANC, a full blood count including differential is required. The ANC is not to be confused with the total White Blood Cell count (WBC) which may be higher.

6.1 Risk factors for neutropenia

- Pre – existing neutropenia from previous cycles of treatment
- Pre – existing neutropenia as a consequence of disease
- Use of highly myelosuppressive agents
- Disease in the bone marrow
- Poor immune functioning
- History of neutropenia with current or previous therapies
- Malnutrition
- Hepatic or renal dysfunction
- Chemo - radiation
- Concurrent use of two or more of the following: - antibiotics, allopurinol, corticosteroids, or sulphur drugs
- Co-morbidities eg: COPD, cardiovascular disease, liver or renal insufficiency, diabetes mellitus, anaemia
- Patient factors, such as age >65, female gender, poor performance status, decreased body surface area
- Open wounds or active infection, including mucositis

6.2 At risk patients of neutropenia - refer SGSHHS CLIN003 section 6.1.2 SGSHHS CLIN003 Febrile Neutropenia – Initial management of patients with suspected or established neutropenic fever
Immunocompromised patients have the potential to be pancytopenic. Anaemia is to be assessed and managed by the treating team and required products administered as per SGSHHS CLIN148 Blood and Blood Product Administration. Thrombocytopenic patients are to clinically assessed prior to any invasive procedures and consultation with the treating team regarding management is necessary. Manual blood pressure monitoring is essential for patients who have a platelet count <100x10^9/L or display signs of active bleeding / bruising.

6.3 Admission of Neutropenic Patients

The Sutherland Hospital

- Neutropenic patients are a priority for a single room.
- Where possible, neutropenic patients under the care of an Oncology / Haematology consultant should be placed on Gunyah.
- If a bed is unavailable on Gunyah, the patient is to be placed in a single room, where possible, in an outlying ward and transferred to Gunyah as a priority.

St George Hospital

- Where possible, neutropenic patients under the care of an Oncology / Haematology consultant, should be placed on 4East or 4North.

6.4 Management of Neutropenic Patients

- At The Sutherland Hospital, all neutropenic patients are to have a Neutropenic Patient Nursing Checklist (SES060.185) placed in their bedside notes, for completion each shift. By signing the form, staff are indicating that they have completed all appropriate care for the neutropenic patient. Any findings from completing the checklist must be documented in the patients clinical notes and escalated as necessary.
- A comprehensive nursing assessment on admission to the ward and at the beginning of each shift is required.
- Thorough handwashing at all times is required.
- High cleaning of rooms immediately prior to admission of neutropenic patients is required.
- A clinical assessment comprised of the following must occur:

  - 4 hourly observations – T, P, RR, BP, SpO2 including over night
  - Meticulous skin, peri-anal and oral assessment – oral care must be charted
  - PIVC / CVAD site – document VIP score in clinical notes each shift
  - Bowel habits
  - Strict fluid balance – fluid summary to be documented at end of each 24 hour period
  - Daily weight taken at the same time each morning

- Intravenous lines are to be changed after chemotherapy, post blood transfusion, after routine CVAD dressing change or resite of PIVC.
- Oxygen devices and nebuliser masks are to be changed on a daily basis if they have been used.
- Staff are to adhere to the five moments of hand hygiene. Visitors are to use clean hand precautions before and after leaving the patients room.
- The number of visitors should be restricted at any one time, to preferably two people.
6.5 Considerations

- Do not administer rectal or intramuscular medications unless specifically ordered by treating consultant.
- Do not insert urinary catheter unless clinically indicated and specifically ordered by the treating consultant. If insertion is necessary, strict aseptic technique is to be adhered to.
- Prohibit visitors with infections from seeing the patient.
- Do not allow flowers or planted plants in patient care areas.
- Avoid exposure to all sources of stagnant water e.g. denture cups, mouth care equipment.
- If a patient has protracted neutropenia i.e. > 5 days, additional observations need to be considered for pneumocystis, herpetic and fungal prophylaxis by the Medical Officer (MO).

Note: Neutropenic patients require close observation for signs of infection. If a neutropenic patient becomes febrile, refer to SGSCHHS CLIN003 Febrile Neutropenia – Initial management of patients with suspected or established neutropenic fever.

7. Compliance evaluation

| Q1: At what point is a patient deemed neutropenic? | A: When the ANC is <1.0x10^9 |
| Q2: Where should neutropenic patients under the care of Haematology / Oncology teams be ideally located? | A: Gunyah at TSH and 4E / 4N at SGH |
| Q3: How often is the Neutropenic Patient Nursing Checklist form (TSH only) completed? | A: Each shift |

8. Keywords

Neutropenia  Infection  Aseptic

9. External references

- Oncology Nursing Society - Risk Factors for developing Neutropenia
- HAA Five Moments of Hand Hygiene

10. Relevant committee approval

Include committee's name(s)

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1. Joanne Newbury, Acting Nursing Co-Director of SGSCHHS Cancer Services, attest that this clinical business rule is not in contravention of any legislation, industrial award or policy directive.

Revision and approval history

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<tr>
<th>Date</th>
<th>Revision number</th>
<th>Contact Officer (Position)</th>
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<tr>
<td>July 2010</td>
<td>0</td>
<td>Belinda Steere Oncology CNC, CHN</td>
<td>August 2013</td>
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<td>November 2013</td>
<td>1</td>
<td>Tanya Flynn Oncology CNC, TSH</td>
<td>November 2016</td>
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