



PEDIATRIC BLOOD AND MARROW TRANSPLANT PROGRAM

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Daily Assessment of Pediatric Stem Cell Transplant Patients by Nursing

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PBMT-GEN-014

DAILY ASSESSMENT OF PEDIATRIC STEM CELL TRANSPLANT PATIENTS BY NURSING

1 PURPOSE

- 1.1 To outline the responsibilities of the inpatient Pediatric Transplant and Cellular Therapy (PTCT) nurse in performing and documenting patient assessments.

2 INTRODUCTION

- 2.1 Supportive Data: At the beginning of each shift, the Registered Nurse (RN) should perform a complete physical assessment on all assigned patients. If there is a positive finding in the initial assessment, a focused assessment should be performed in a maximum of 4 hours. If there are no positive findings at the first assessment, a repeat assessment should be performed in 12 hours. The RN should visually assess each assigned patient at least once hourly.
- 2.2 See specific care guidelines for monitoring patients receiving high dose chemotherapy, anti-thymocyte globulin (ATG), alemtuzumab, rituximab, total body irradiation (TBI), total parenteral nutrition (TPN), intravenous immune globulin (IVIG), blood product, and cellular products.

3 SCOPE AND RESPONSIBILITIES

- 3.1 This procedure will be used in the daily assessment of pediatric stem cell transplant patients by nursing staff.
- 3.2 All pediatric blood and marrow transplant RNs will follow this procedure.

4 DEFINITIONS/ACRONYMS

- 4.1 ADLs Activities of Daily Living
- 4.2 ATG Anti-thymocyte Globulin
- 4.3 CAPD Cornell Assessment of Pediatric Delirium
- 4.4 CAR Chimeric Antigen Receptor
- 4.5 CRS Cytokine Release Syndrome
- 4.6 IVIG Immune globulin, intravenous
- 4.7 PTCT Pediatric Transplant and Cellular Therapy
- 4.8 PRN As needed
- 4.9 RN Registered Nurse
- 4.10 TBI Total Body Irradiation
- 4.11 TPN Total Parenteral Nutrition

5 MATERIALS

5.1 NA

6 EQUIPMENT

6.1 NA

7 SAFETY

7.1 NA

8 PROCEDURE

8.1 Vital Signs

- 8.1.1 Temperature, blood pressure, pulse, respirations, and oxygen saturation should be performed at least every 4 hours.
- 8.1.2 Vital signs should be repeated frequently if patient has a fever greater than ($>$) 38.5 C or $>$ 38 for recipients of Immune Effector Cells (such as Chimeric Antigen Receptor--(CAR) therapy at risk for cytokine release syndrome (CRS)
- 8.1.3 Oxygen saturation should be assessed more frequently if patient is febrile, tachycardic, tachypneic, or short of breath.

8.2 Neurological Assessment

- 8.2.1 Perform neurological assessment, including level of consciousness, movement, and strength, at the beginning of each shift and PRN if any changes noted. Provider should be notified of change.
- 8.2.2 Cornell Assessment of Pediatric Delirium (CAPD) should be performed each shift and providers should be notified of any changes from baseline and all scores $>$ 9.

8.3 Oral Assessment

- 8.3.1 Examine oral cavity at least once a shift. Encourage compliance with mouth care.
- 8.3.2 Report any mucosal bleeding.

8.4 Cardiopulmonary Assessment

- 8.4.1 Auscultate heart and lung sounds once per shift and as needed (PRN) if any change in objective or subjective cardiac or pulmonary findings is noted (i.e. increased respiratory or heart rate, shortness of breath, alteration in fluid balance, chest discomfort).
- 8.4.2 Reassess frequently.

8.5 Gastrointestinal Assessment

- 8.5.1 Auscultate for bowel sounds once a shift and as needed if indicated by patient condition.

- 8.5.2 Examine stool for color, consistency, and volume.
- 8.5.3 Record color and volume of emesis.
- 8.5.4 Report bloody stools or emesis to physician.
- 8.6 Genitourinary Assessment
 - 8.6.1 Assess for signs of cystitis every shift.
 - 8.6.2 Measure volume of urine and test for blood, glucose, and protein as ordered.
 - 8.6.3 Report gross hematuria to physician.
- 8.7 Skin Assessment
 - 8.7.1 For complete details on skin assessment, see related DUH policy: *DUHS Pressure Injury and/or risk for Development Policy*
 - 8.7.2 Perform Braden Q or Braden (age dependent) score each shift as part of pressure ulcer prevention screening
 - 8.7.3 Examine skin each shift for rash, bruising, signs of infection, or wounds.
 - 8.7.3.1 Examine any wounds that are present each shift for signs of infection and at time of dressing change. If patient has a gauze dressing present, ensure dressing change is completed a minimum of every 24 hours
 - 8.7.4 Examine catheter site every shift and at time of dressing change.
 - 8.7.5 Ask patient if perineum is irritated or painful. Examine perineum if patient has a complaint. In young children wearing diapers or pull-ups, visually assess perineum at least once per shift.
 - 8.7.6 Report any new rash or extension of rash on all patients.
- 8.8 Pain Assessment
 - 8.8.1 Assess for type, location, and intensity of pain every 4 hours.
 - 8.8.2 If patient is experiencing pain please refer to the DUHS policy, *Pain Management Policy*, for assessment guidelines.
 - 8.8.3 If pain is present, monitor effectiveness of pain management and report uncontrolled pain to physician.
 - 8.8.4 If patient is receiving continuous analgesia, monitor effectiveness every 2 hours.
- 8.9 Nutritional and Fluid Assessment
 - 8.9.1 Unless medically contraindicated, patients should be weighed at least once a day.
 - 8.9.2 Record intake of food and fluids.
 - 8.9.3 Monitor fluid status every four hours. Record negative or positive fluid balance.

8.9.4 Report poor oral intake and assess causes.

8.10 Psychosocial Assessment

8.10.1 Assess coping mechanisms, sleep pattern, and participation with Activities of Daily Living (ADLs) each shift. Staff may refer to the related DUH policy *DUHS Basic Care of the Hospitalized Patient Policy* for additional information.

8.10.2 Obtain orders for appropriate referrals to assist with coping (social work, physical therapy, occupational therapy, pediatric quality of life team, and/or Chaplain).

9 RELATED DOCUMENTS/FORMS

9.1 DUHS Policy: Pain Management Policy

9.2 DUH Policy: DUHS Basic Care of the Hospitalized Patient Policy

9.3 DUH Policy: DUHS Pressure Injury and/or risk for Development Policy

10 REFERENCES

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11 REVISION HISTORY

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08	MC author: S. McCollum SME: Kris Mahadeo Erika Goeckermann Nursing Leadership	Acronyms defined throughout Section 8.1 - updated to include additional vital sign notification parameters. Section 8.2 - updated to include CAPD assessment. Section 8.7 - updated to include braden scoring, and examination for wounds. Sections 8.7, 8.10.1, and 9 - updated to include additional related DUH policies. Section 10 - updated to include additional references.

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