



The Ottawa  
Hospital | L'Hôpital  
d'Ottawa

# Living with Bone Marrow Failure:

A Nursing Perspective

*Clinical Nurse Experts  
In Hematology*

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# Clinical Nurse Experts: Who are we?

Six Registered Nurses from the Medical Day Care Unit

- Combined nursing experience of 67 + years
- Inpatient & outpatient hematology nursing experience
- Canadian Nurses Association - Oncology certification
- New role since September 2007 – funded by Cancer Care Ontario
- Available 7 days of the week





# Clinical Nurse Experts

Patient Roster: 244 on chemotherapy

33 Patients on demethylating agents since  
May 2009

Currently:

19 Vidaza

2 Dacogen

2 Post-ATG





# MDS Analogy

Neutrophils



Hemoglobin



Platelets





# Anemia

Hemoglobin <100

Normal Hemoglobin F(115-155) M (130-170)

## Signs & Symptoms:

- Tired, weak
- Dizzy
- Short of breath
- Pounding in your head, headache
- Ringing in your ears





# Anemia

What should you do:

- Slow down or rest if you get short of breath
- Save your energy – short periods of activity & rest in between
- To avoid getting dizzy, move slowly. When getting up from a lying position sit up for several minutes before standing. Stand up slowly to avoid fainting





# Transfusions: Red Cells

- Transfusion parameters (80-100)
- Type & Crossmatch
- Risks (0.5-3%)
  - minor reaction
  - infection
  - iron overload
- Benefits
  - more energy
  - improved oxygen supply to body





# Thrombocytopenia

Platelets < 50

Normal Platelets 125-400

## Signs & Symptoms

- Bleeding gums & nose
- Bruising, petichiae
- Blood in stool, urine
- Coughing up blood





## Transfusion: Platelets

- Parameters (<10 -50)
- No Type & Crossmatch required
- Risks – similar as for blood
- Benefits – prevents bleeding ie. mouth





## Torture in Medical Day Care





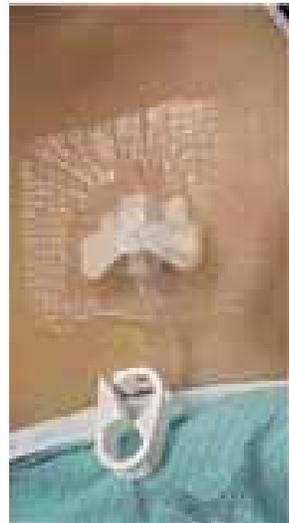
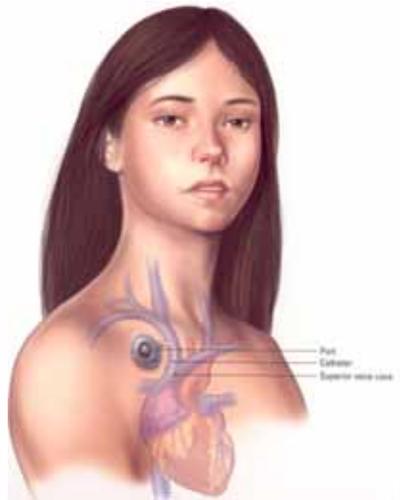
# Central Lines

PICC (Peripherally Inserted Central Catheter)



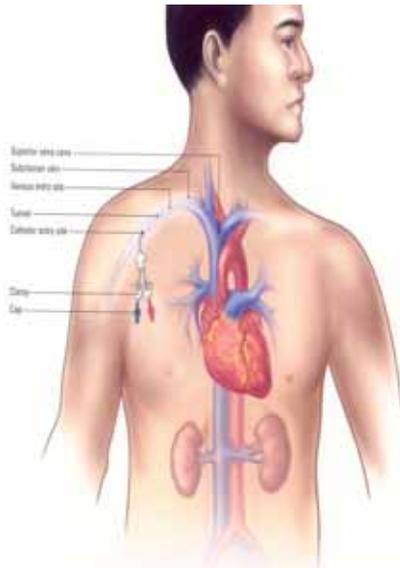


# Implanted Port





# Hickman Catheter





# Exercise and Low Counts

- effects of bedrest & physical inactivity
- Benefits of exercise
  
- If plts <10 walk only
- Plts (10-20) gentle exercise, no resistance
- Plts (20-50) up to 5 lb weights
- Plts >50 biking, jogging





## Exercise & Central Lines

You can exercise if you have a line!

Move the affected shoulder in any direction  
but avoid strong swinging (ie. Golfing) or  
forceful stretching





# Exercise

How much exercise is enough? How much is too much?

When should you consider a walking aid?





## Nutrition

- Make sure every mouthful counts
- Drink 8-10 glasses of fluid every day
- Choose high energy, high protein foods and drinks
- Small frequent meals & snacks





# Infection

## Signs & Symptoms

- Fever of 38.0 C or 100.3 F
- Chills
- Cough with yellow or green mucous
- Sore throat
- Burning and/or frequent urination
- Redness, heat, swelling and/or drainage from a wound





# Infection Prevention: Handwashing

- Use soap and warm water for 20 seconds
- Use alcohol-based sanitizer (70%) if you can't use water

Keep your hands away from  
your face & mouth!





# Infection Prevention

- Check your temperature
- Avoid people with colds, flu, chicken pox, etc.
- Avoid large crowds, but don't live in a bubble
- Get your flu shot & your family too!
- Avoid raw meat & sushi





## What if I get an Infection?

- See your family doctor or hematologist
- Go to an Urgent Clinic or the Emergency Room

**Don't fight the infection by yourself!**





## Going to the Emergency Room

What to say?

- 1) I have MDS/AA/Leukemia
- 2) My counts are low
- 3) I have a fever





# Hospital Admission

- Staff Hematologist, residents
- Private Room, location
- DNR (Do Not Resuscitate) Order
- Family support





# Communication

## Keep a Health Diary

- List of current medications (including vitamins & supplements)
- Blood work results
- Medication conditions ie. Diabetes, high blood pressure
- Dates
- Signs & symptoms





# How to Help Yourself

Maximize your resources:

- Educate yourself about your disease
- Social worker, dietitian, physiotherapist, home care, pharmacist, etc.
- Support group





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# Mitch's Angels: Helping you fight your disease

*Photograph by Michelle Valberg*

