

No disclosures

Scholarship Presentation

2 days Radiation Oncology

2 days Wellness Beyond Cancer Care Program

1 day PICC line and Port-a-cath

4 days Lymphedema clinic , Montreal

3 days MAID program assessment

2 days Marijuana clinic

2 days Diabetes clinic

2 days Cardiology clinic

2 days Respiriology clinic

20 days (4weeks)

Objectives:

Update knowledge, improve patient care

Achieved:

1. Stated objectives
2. Better understanding of the team, available resources
3. Learned various approaches to patient discussions interactions
4. Able to develop more consistent messaging for patients

Objectives for today

2-3

Case:1

Called to assess patient with redness at PICC insertion site.

DDX for redness at site:

- 1 - Cellulitis
- 2 - DVT
- 3 - thrombophlebitis
- 4 - tape reaction

PEARL #1

TAPE REACTION IS USUALLY NOT A TAPE REACTION!!!!

- Reaction to chlorohexidine from not drying 3mins, chemical reaction of wet with skin
- Can check for tape or actually sensitivity to cleaning solution, test area. Burning/itching with test area.

Case 2:

Doctor, I have been told I can't have bloodwork drawn from my PICC line?

Why?

PEARL #2

Reasons why not:

- 1- device designed for infusion, not withdraw, will be damaged overtime
- 2- infection risk
- 3- bloodwork results may be affected (heparin with port lines (affect INR), double lumens-dilution, etc)

Exception: very poor veins, blood cultures

Case 3:

My patient is on Herceptin and the recent echocardiogram shows a falling ejection fraction. What can I do while waiting for consult?

PEARL #3

- 1- IF $>10\%$ decline from baseline LVEF , hold chemo agent
- 2- START CARDIAC MEDICATIONS (pending consult)
- 3- consider BASELINE ECG

Echocardiogram

- use **oncology protocol** measures LV strain
- preclinical marker for LV fn-less than(-18)
- not useful if already has EF decline < 55%

EF N=53-55%

45-55 (53) mild decline

30-45 moderate

<30 severe

Relationship of LVEF to LLN	Absolute Decrease Of less than 10 points from baseline	Absolute Decrease Of 10 -15 points from baseline	Absolute Decrease Of greater than or equal to 16 points from baseline
Within Normal Limits	Continue	Continue	Hold *
1-5 points below LLN	Continue	Hold *	Hold *
greater than or equal to 6 points below LLN	Continue *	Hold *	Hold *

- *Repeat LVEF assessment after 3-4 weeks, consider cardiac assessment
- If criteria for continuation are met – resume trastuzumab
- If 2 consecutive holds or a total of 3 holds occur, discontinue trastuzumab
- from BCcancer.bc.ca and Canadian Trantuzumab working Group

PEARL- best to start meds asap, best results/recovery in first 6mths

1) **ACE** : **Enalapril** 5mg bid, can start 2.5mg bid
watch BP, CR, lytes (if cr>150, 2.5 mg OD, but watch)

AND

2) **bblocker**: -watch BP

Not with 2nd/3rd AV block, HR <50, asthma

Carvedilol 3.125mg bid and can titrate every few wks, target 25mg bid

Bisoprolol (more cardioselective) -1.25 mg once daily with target dose of 5 to 10 mg once daily.

(extended release metoprolol ok , too)

use both if BP will support it

patient to monitor BP if able, parameters to hold

Anthracycline toxicity

1% 10yrs out

seen much less as total dosage lower

stop med

start Ace inhibitor, blocker

cardiology consult

Case 4:

The Ct scan ordered shows incidental coronary calcifications.
What should I do?

PEARL #4

Consider blood lipid profile (non-fasting)

Consider statin therapy (diet, exercise)-3yrs for effect

initiate discussion via family doctor

Framingham score

consider formal cardiac CT, if pt wants, accurate Agatston score (>100)—note: radiation dose is higher

Case 5:

My patient has abdominal swelling, bloating, discomfort and some pain, feeling of fullness, appetite less. What do I do?

DDX Abdominal swelling

Tissue edema

ascites -cirrhosis (80%), malignancy (7%), heart failure, other

gas - U/S (or CT) to confirm and check liver, etc.

bowels sluggish/constipation (off and on pains)

liver failure, etc

Measure abd girth (and weights)

- standing, umbilical, same time each day

- If girth fluctuates, then gas, not ascities

- if accumulating from baseline \geq 2 inches, consider ascities

PEARL #5a

Ascities-waiting for consult -what can I do?

Can trial-40mg lasix and 100 mg spiro lactone daily

- monitor lytes to start q2wks
- possibly 25 percent are helped, often good with GI and breast malignancies, also liver mets, cirrhosis with HCC, malignant Budd-Chiari syndrome (vs peritoneal carcinomatosis)
- **Monitor abd girth**- can adjust how often given, hold meds if for **symptoms or SBP or less 90**, can do every couple days, hold both

PEARL #5B

Therapeutic pleurex drainage of malignancy:

- rarely urgent
- not always necessary
- doesn't always help
- may get nausea as things shift
- no need to clamp unless cirrhosis and portal hypertension.
- 5-6 L, good amount
- in malignant ascities, no need for albumin (even in cirrhosis, $\leq 5L$, no albumin)
- if rapid accumulation- look for clot or tumour hemorrhage, other causes
- **ultrasound guidance recommended**

Case 6:

Patient seen in consultation, going to start chemo.
What baseline bloodwork to do?

CBC

Lytes

LFTS

creatinine

glucose

albumin

Ca, po₂, mg

tumor markers

urine for protein

WHAT IS MISSING?

PEARL #6

CBC

Lytes

Glucose

LFTS

creatinine

glucose

albumin

tumor markers

urine for protein

Consider HbA1C

Screen those most at risk

HbA1c at initial visit-

- inaccurate: transfusion last 3mths
significant anemia (give false low result,
iron , b12, folate)
- if elevated >6.5 , refer to family DR/diabetic specialist
- target ≤ 7.0 approx
- monitoring with **glucometer bid with chemo,**
- **qid on days of steroids and for 3-5 days** (1/2 life of decadron 36-52 hrs)
- goal: glucose 6-10

PEARL: poor glucose control may contribute to symptoms that we might be contributing to chemo

Case 7:

Patient is being assessed for severe nausea and vomiting.

What should the bloodwork include if they are diabetic?

What to do re. current medications if sent home or even admitted?

PEARL #7a

Anion gap-metabolic ketoacidosis

euglycemic ketoacidosis -

SGLT2 Inhibitors (...flozin)

- [Canagliflozin](#) (Invokana)
- [Dapagliflozin](#) (Forxiga)
- [Empagliflozin](#) (Jardiance)
- [Ertugliflozin](#) (Steglatro)

PEARL #7b

in significant nausea and vomiting, anorexia, unable to maintain adequate po olds, or decline in renal function, **hold "unsafe" medications-** until improved:

S-sulfonyureas

A-ace inhibitors

D-diuretics, direct renin inhibitors

M-metformin

A-angiotensin receptor blockers

N-NSAIDs

S-SGLT2 inhibitors (canagliflozin, dapagliflozin, empagliflozin)

reference: Diabetes Canada -Sick-Day Medication List- Appendix 8
can give patients reference page

CASE 8

My patient is having skin complaints during or after their radiation treatments? What can I suggest?

Radiation Dermatitis

For Breast , usually 1wk post treatment adjuvantly, last 2-4wks

Confirm no confounding factors like infection, cellulitis, then tx topical

PEARL #8

Prophylactic

3M Cavilon Barrier Film- alcohol-free, no sting, waterproof, last unto 3days protects against friction trauma, time to repopulated epidermal stem cells and avoid desquamation and maintain skin hydration while allowing skin to breathe.

Use every Monday, Wed, Friday -continue after few wks maybe
OR
Glaxol base cream

NO lanolin/petroleum- interferes with radiation effectiveness

Lock, Michael, London, On, Cureus 2019
Phase 3 Randomized Barrier Film vs GBC
(standard), lumpectomy, adjuvant, 55pts

conclusion:

**Unpaired analysis, Significant reduction on
the lateral side (more exposed to friction
issues) in dermatitis during treatment, and in
symptoms of pruritus and burning, paired
analysis no significant difference**

if itchy, burning: (skin intact)

- HC 1%
- Betamethasone cream bid
- Celestoderm v/2 cream -bid

if burn like, oozing , broken , more severe

- **Flamazaine** (Silver sulfadiazine)cream 1% apply bid-tid
- NOT before rads - silver interacts

if allergic, Fuscidin

MAID EXPERIENCE

PEARL #9

Ideas???

**review of medicines and monitor technique
case meeting/team meetings for individuals
improved connection to community
improved housing**

PEARL #10

Exercise, exercise, exercise

Walk and swim and anything else you can manage

Diabetes

heart disease

cancer (ie) decrease breast ca recurrence by 24-34%)

lymphedema

SUMMARY OF PEARLS

- 1 tape reaction usually due to chlorohexidine reaction**
- 2 reasons for not using piccs, port for bloodwork**
- 3 reduced EF-start cardiac meds (ACE, BBlocker)**
- 4 coronary calcifications-discussion, consider statin (3yrs)**
- 5 ascites- look for other causes, trial medicine, and girth**
- 6 baseline HgA1c, monitor on steroids**
- 7 anion gap for diabetic pts feeling unwell, SADMANS**
- 8 Skin complaints with rads-prophylaxis -barrier spray**
- 9 MAID -social and medical inadequacies**
- 10 exercise, exercise, exercise**

Thank-You to CAGPO

LYMPHEDEMA

**40 year old woman with resected
breast ca presenting with
intermittent right arm swelling**

**60 year old male with metastatic
colon ca , peritoneal carcinomatosis
and ankle/lower leg swelling
persistent**

Pearls

consider lymphedema, r/o other causes as clinically indicated

refer for compression garments if more than minimal or 10% volume difference

if mild may start with standard sleeve at fitter, more than mild , use custom garment

do not lasix to treat lymphedema

massage rarely indicted (exception :head and neck)

exercise

suggest pre surgery arm measurements for breast ca and then port tremens every 2-3mths

cellulitis and edema-very important to get edema treatment

marijuana

watch:marketing in retirement homes
no randomized control studies- antedoctal
not cover (excp;some private for palliative)
oil -various uses
try standard treatments first
CBD (no behavioural changes) vs THC
can do low ratio 1:20
start low, follow every 3-4mths