Wheel of Doom Pot Pourri

Allison Small MD

Objectives

Describe the basics behind pubertal suppression

List the complexities of MAiD in dementia

Describe the common reactions seen in immunotherapy

List some of our medical “neighbours”

List some little known resources to aid in your care of patients

Experience the thrill of the wheel of doom!

Theory, Mus
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Finance
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functions
(Sinosodal/Exponential
20m
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Intel
Radicals/S
15m
Triangles!
Compr
Ecn.
10m

The Infamous Wheel of Doom

Tormenting….I mean teaching students since 2016

- In 2016 fully concussed and stubbornly refusing to admit defeat I was trying to teach and felt guilty I couldn’t do a better job
- On days my student was not with me he would either get envelopes with questions or “texts of doom” and was expected to answer by the end of the evening.
- Typical just random questions that popped into my head that could be easily answered in 1-2 lines.
- We joked about a carnival wheel…before he left for the year he presented me with my beloved wheel of doom!

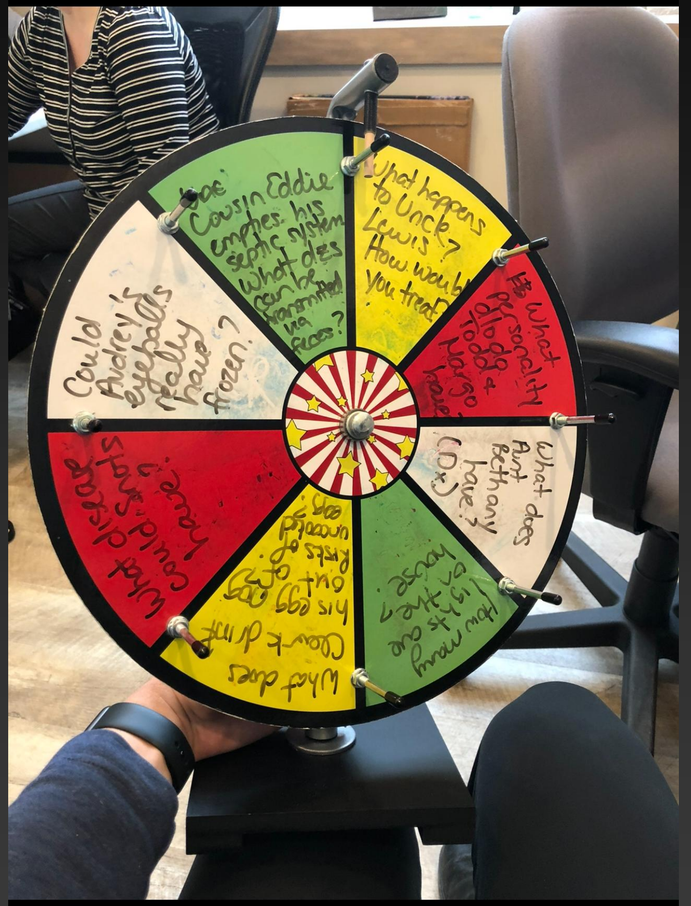
How it Works

- At the beginning of the year each triangle is designated with a different system e.g. cardiovascular, respiratory, endocrine, psych, GI etc.
- By the end of the year there are only two categories: DDx and Tx on alternating triangles
- By the end of the day everyone is tired. Rather than desperately trying to think up a question or topic we use the wheel.
- Student spins the wheel. I ask a question from the “winning” category. Student answers. I teach. Everyone goes home. Win-Win for everyone!
- Only 1 or 2 students are still haunted by the clicking of the wheel…

“Honoured to have survived the wheel, it allowed me to be prepared enough for residency and gave me the ability to brave the great white north” Mike Falconi

Matt Kutschke, family doc in Pembroke.

Proof the wheel can be fun…National Lampoon’s Christmas Vacation themed wheel!



“Proof that the wheel leads to graduation” Jacob Belanger

“The psychological torture of the wheel of doom hidden inside the smile” Ryan Kirkby

“Please see an attached picture for your

~~Wall of shame~~ rounds next week”

Thomas Edwards

The wheel’s most recent graduate!

The white board

My other essential teaching tool

- More and more I find my learners are visual learners and learn best by writing/seeing
- White board allows them to write out their answers, or organize their thoughts before answering
- Also love the white board because I can assign something like “causes of GI bleeding” or “DDx of abdominal pain” and they can draw it out while I see a patient or get caught up on paperwork
- This works especially well if I remember to ask about learning style at the start of the rotation….

MAiD in Dementia

A heavily nuanced and complex affair

Timing?

How do you define suffering?

Capacity to understand a waiver?

Advanced state of decline?

Capacity to consent?

Life expectancy?

After loss of capacity are they suffering?

Are they track 1?

Death reasonably foreseeable?

How do you define “ten minutes to midnight”?

Track 2?

MAiD in dementia requires exquisite timing and multiple assessments over time

Eligibility criteria for MAiD

Specific to dementia

- Eligible for health care in Canada
- Over 18 years of age
- Serious and incurable disease
- Causes intolerable suffering?
- Advanced state of decline?
- Capacity to consent?
- Death reasonably foreseeable?

Intolerable Suffering?

- Most identify fear of loss of function and fear of long term care as their greatest anticipatory suffering.
- Loss of cognition is a less often identified fear and typically in those with higher education
- Many of the items that people identify as their “triggers” for MAiD (nursing home, incontinence, inability to feed self) actually occur long after losing capacity. The gap between loss of iADLs and loss of ADLs can be several years.
- If they have a waiver then suffering must be documented BEFORE loss of capacity for waiver to be valid

Suffering is subjective. Some people identify anticipatory suffering (“I fear…”), some anticipate having suffering in the future (“when I can’t…”)

Advanced State of Decline

- By definition declining cognitive function puts people in an advanced state of decline
- BUT… two people at the same cognitive level may not be in the same advanced decline depending on where they started from cognitively e.g the Harvard educated lawyer who can no longer remember names or manage their calendar is likely in more of an advanced state of decline than Allison at a similar level.

Do they have capacity?

- Capacity is task specific. Someone may not have capacity to manage their finances, but could still have capacity to consent to MAiD.
- And just because they have capacity to consent to MAiD, they may not have the capacity to understand the many nuances of a waiver and therefore be ineligible to sign a waiver. Until recently most of our MAiD team did not understand how nuanced and complex the waiver was!!
- In dementia episodic memory is impaired (so difficulty retaining options related to life expectancy and alleviating suffering) but semantic memory (“what things means”) may not be a problem. Part of eligibility is understanding all options available to them (treatment, end-of life care etc.)

- To demonstrate and document capacity someone must:
- 1. Have the ability to communicate a choice (they can have help)
- 2. Have the ability to understand relevant information
- 3. Have the ability to appreciate the current situation and its consequences
- 4. Have the ability to reason about treatment options and their consequences

Determining capacity may require serial assessments, consultation with family, specialists and primary care providers.

Is death reasonably foreseeable?

- Some sources assert that dementia is a lethal disease
- CAMAP guidance document (2022) asserts that “reasonably foreseeable” means either that
- 1. Death will occur in a time “not too remote” or
- 2. That the cause of a person’s death is predictable
- The document further asserts that death in dementia is “reasonably foreseeable” as their death is predictable.
- The law does not define a timeline rather they state it is a “person-specific medical decision"

BUT….

- The average lifespan for someone with Alzheimer's is 3-9 years. Lewy Body dementia has a lifespan of 2-20 years. Vascular dementia is 3-5 years and Fronto-Temporal dementia can be 2-15 years. 15-20 years seems fairly "remote"
- And if someone is otherwise physically healthy their death may not be as "reasonably foreseeable" as someone who has multiple comorbidities.
- And the person still living independently at home likely has a longer life expectancy than someone already requiring long-term care
- And frailty is actually a bigger predictor of death than dementia

Death is reasonably foreseeable decision needs to be determined for each individual after considering all of the variables.

So how do you know when it’s time?

- Experts talk about “ten minutes to midnight” which is 3-4 months before loss of capacity.
- Need to identify road signs early in assessments to use as benchmarks for deterioration (eg reading, knitting, puzzles…)
- Need to assess these people frequently and communicate with families frequently to identify early signs that might predict that loss of capacity is coming
- Waiver of consent requires people to have capacity to understand they will soon lose capacity, choose a date and understand the ten criteria listed on the waiver. If waiver in place, proceed when criteria met.

But what about advanced requests?

- Advanced Requests (AR) are currently available in Quebec, Senate committee continues to work towards ARs for the rest of Canada
- These are expected to be only for those who have already been given a diagnosis of a neurocognitive disorder or other condition that will affect capacity, they will not be for healthy individuals.

1


Diagnosis
Formulation of Advance Request
Notification
Examination
Administration

- Current process in Quebec:
- 1. Diagnosis of serious and incurable disease that will eventually lead to loss of capacity
- 2. Assessment and patient outlines the circumstances under which they would wish to be dead following loss of capacity.
- MD confirms these would arise from current diagnosis and translates into medical-ese
- Form signed by a trusted third party, patient and both assessors.
- 3. Capacity lost and the two assessors determine that all safeguards met as well as all conditions previously laid out by patient and MD
- 4. MAiD is provided

Pubertal suppression

- Pubertal suppression can be very beneficial in younger transgender folk who are still exploring their gender identity or for whom puberty intensifies their dysphoria (or for those who predict worsening dysphoria with the onset of puberty)
- These may be kids in the process of being assessed and “diagnosed” with gender dysphoria or for those who are too young for gender-specific hormone therapy.
- For those who are extremely dysphoric, pubertal suppression may be life saving
- Improves mental health, decreases self-harm, improves social interactions and decreases the need for future surgeries (e.g. top surgery)

Lupron
GnRH analogue

- Work by suppressing release of endogenous sex hormones and pressing “pause” on puberty
- Can be started once child reaches Tanner 2 (thelarche in girls, gonadarche in boys, early pubic hair growth). In girls can start up to two years post-menarche and in boys can start even once they reach Tanner 5 (if they prefer over “T blockers”). Likely no risk to starting >2 years post-menarche, but only benefit likely to be menstrual suppression.
- Considered reversible but potentially could impact future bone density, final height (taller or shorter) and may affect future fertility depending on where the child is in puberty when they start

Continuous Leuprolide therapy

Initial Response

GnRH Receptor stimulation

↑FSH release

↑LH release

↑ Estradiol & Progesterone (women)

↑ Testosterone (men)

Chronic Effect (2-4 weeks) *

GnRH Receptor desensitization

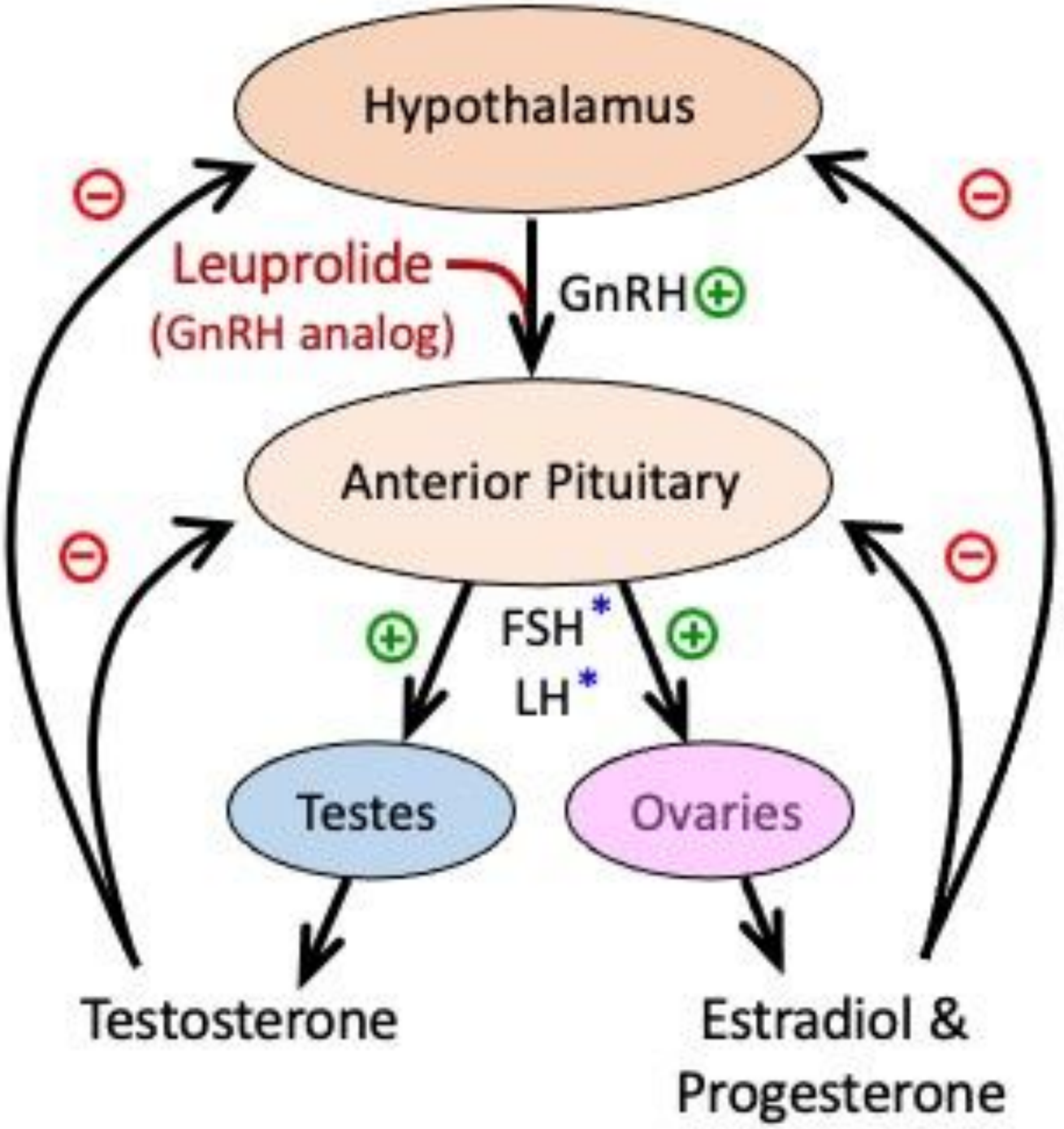
Hypogonadism

⬇FSH release

⬇LH release

⬇Estradiol & Progesterone (women)

⬇Testosterone (men)



- Can often see worsening of pubertal symptoms 2-3 weeks after first injection
- Puberty typically resumes 3-6 months after stopping
- Can continue until ready to start gender affirming hormones if desired and/or appropriate
- Dosing 11.25mg q12 weeks or 7.5mg weekly
- Should take calcium and vitamin D while on Lupron to preserve bone density
- Need to be aware it does not prevent pregnancy or STIs.
- Covered by OHIP+

Assigned at birth

Effect of Lupron

Biologic Males	Biologic Females
Halt growth of genitalia	Halt breast growth
Halt facial hair development	Halt widening of hips
Halt voice changes	Halt menstruation
Decrease sex drive/erections	May decrease sex drive

Menstrual suppression

- Some transgender males solely desire menstrual suppression rather than full pubertal suppression. Periods often lead to intense dysphoria.
- Progestin-only options preferred (IUD, Nexplanon) but can use OCP if preferred. Unpredictable spotting with Nexplanon/Progesterone only pill can intensify dysphoria
- If/When testosterone is started amenorrhea typically occurs within the first few months. IUD is a great form of contraception for those transgender males who engage in penetrative intercourse
- This is a good choice for those still exploring their gender identity but who have completed puberty

Rejection Sensitive Dysphoria

Rejection Sensitivity/ Rejection Sensitive Dysphoria

- Not an official DSM 5 diagnosis, but more a symptom description
- Frequently associated with ADHD, autism, social anxiety and trauma history
- Intense emotional reaction to real or perceived rejection, criticism or failure.
- These individuals struggle to regulate their emotions in response to rejection (real or perceived)
- They often mount a disproportionate and overwhelming emotional response to situations involving rejection (real or perceived)

*From ClevelandClinic.org

An intense emotional sensitivity to (perceived) criticism or rejection

Often experienced by those with ADHD, Autism, Social Anxiety, or Trauma

Rejection triggers huge feelings of depression, rage, anger, or severe anxiety

Often seeing neutral or vague reactions as rejection or as silent criticism

Experiencing severe anxiety, avoidance, or big emotions before an anticipated rejection

Often people-pleasers to avoid being criticized

Difficulty starting tasks, projects, or goals when there's a chance of failure

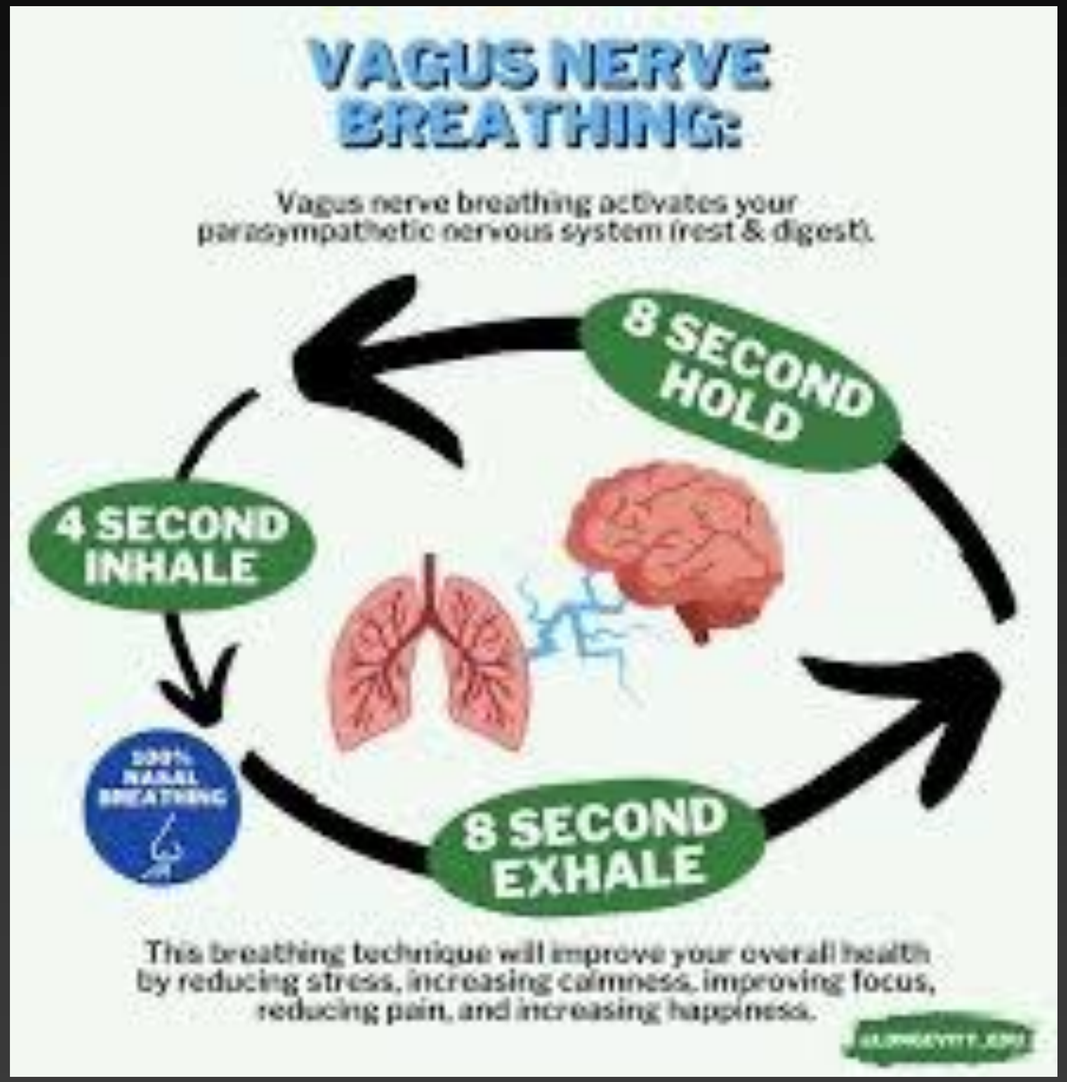
Inability to regulate emotional responses to feelings of failure and rejection

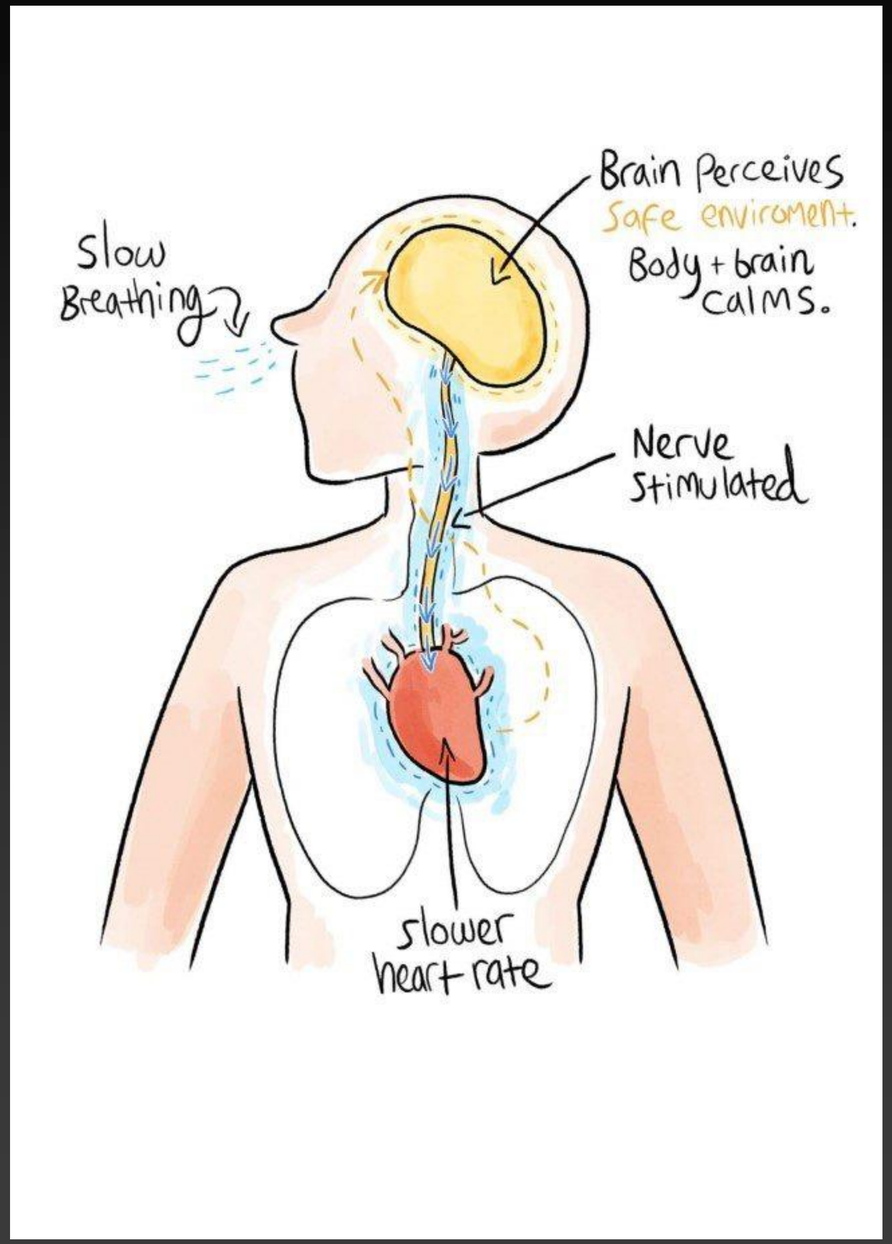
Fear of rejection negatively affects your life and relationships

SelfLoveRainbow

Treatment

- Cognitive Behavioural Therapy
- Mindfulness and Relaxation Techniques—vagal breathing, box breathing etc.
- Positive self-talk
- Grounding Techniques—allows time and space for the brain to settle. Something like the 5 senses exercise.
- Emotion Regulation Skills with DBT


VAGUS NERVE BREATHING:
Vagus nerve breathing activates your parasympathetic nervous system (rest & digest).
8 SECOND HOLD
4 SECOND INHALE
100% NASAL BREATHING
8 SECOND EXHALE
This breathing technique will improve your overall health by reducing stress, increasing calmness, improving focus, reducing pain, and increasing happiness.


Slow Breathing
Brain Perceives Safe enviroment.
Body + brain calms.
Nerve Stimulated
slower heart rate

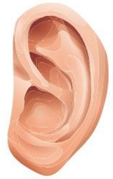
Stay Grounded Using Your 5 Senses

Relax Your Body, Take a Few Deep Breaths and Focus on the Following...

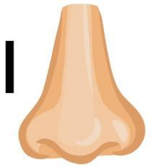
Things You Can See

Things You Can Feel

Things You Can Hear



Things You Can Smell



Thing You Can Taste

Gender affirming care in Muskoka

Something shiny and new!

maoht.ca

Immunotherapy reaction

A tour through the “itises”

Immunotherapy

- Whereas traditional chemotherapies work by directly targeting and killing cancer cells, immunotherapy works by boosting your natural defences to fight the cancer more effectively
- Check point inhibitors: these release the brakes on your immune system (eg. pembrolizumab, nivolumab, durvalumab, ipilimumab)
- Monoclonal antibodies: mark cancer cells so that the immune system can easily seek and destroy (eg. rituximab, trastuzumab)
- CAR-T: T-cells are removed, reprogrammed to hunt cancer and then re-injected (used in leukemia/lymphoma)

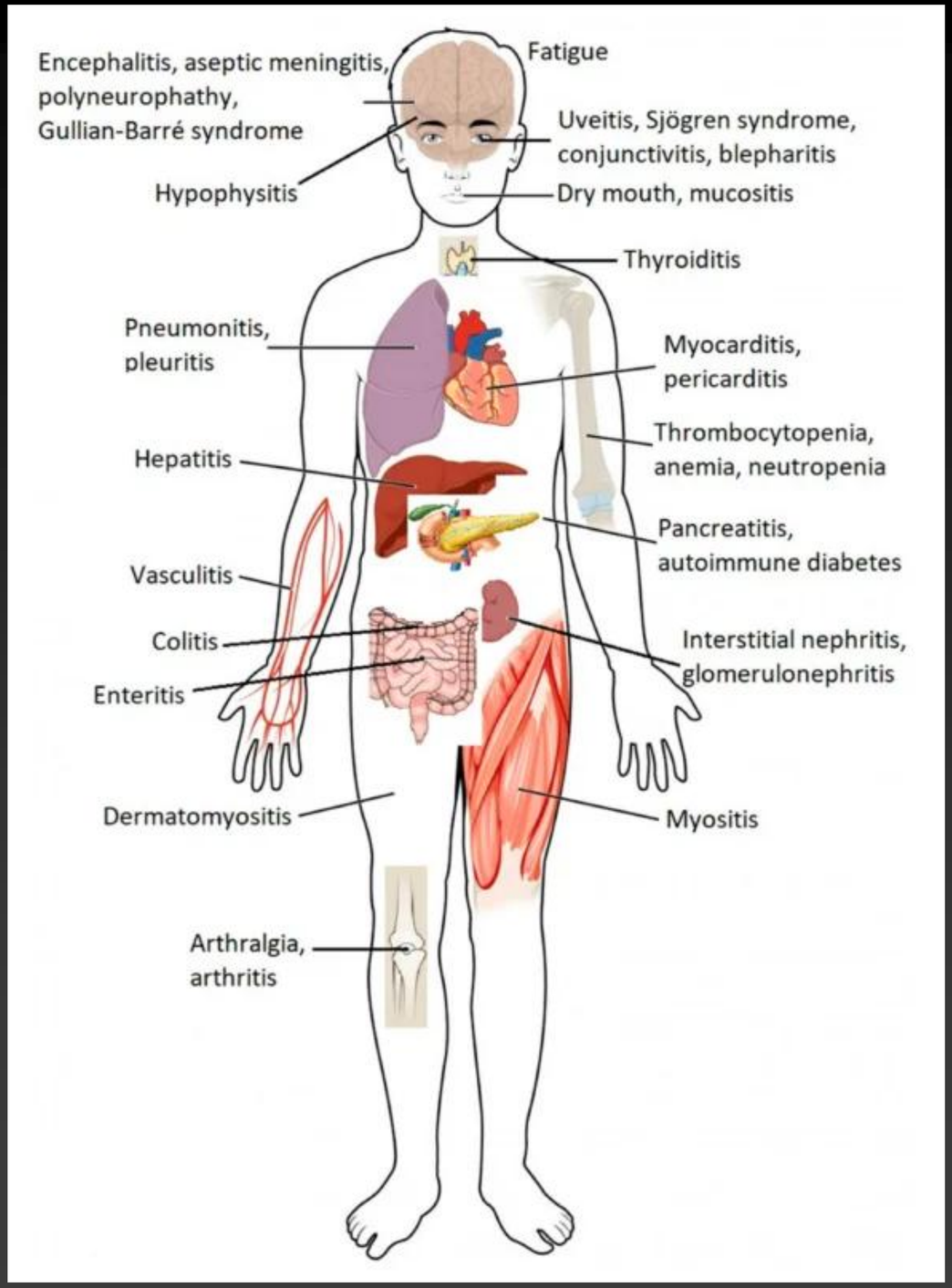
Chemotherapy side effects

- These are the ones we are most familiar with
- Nausea, vomiting, alopecia, diarrhea, neutropenia, neuropathy, chemo brain…
- Typically these onset at time of treatment and resolve shortly after finishing chemotherapy

- GREAT RESOURCE: cancercareontario.ca under “Guidelines and Advice” are symptom management guides. Algorithms for every symptom under the sun…how to assess and how to manage.
- Every student who works with me learns about these guides!

Immunotherapy side effects

- When boosting the immune system it can sometimes become overactive attacking non-cancer cells and leading to inflammation and damage.
- Side effects may start days to weeks after starting treatment (fatigue, mild rashes etc.), within the first few months (digestive issues, joint pain) and even as much as a year later (lungs, liver, colon).
- Whereas most chemo side effects will be discovered and managed in the chemo clinic, immunotherapy side effects may present to your office even after treatment has finished.
- Side effects may last weeks to months. Some can be permanent (eg diabetes and damage caused by pneumonitis/nephritis/myocarditis)


Encephalitis, aseptic meningitis, polyneurophathy, Gullian-Barré syndrome
Fatigue
Uveitis, Sjögren syndrome, conjunctivitis, blepharitis
Hypophysitis
Dry mouth, mucositis
Thyroiditis
Pneumonitis, pleuritis
Myocarditis, pericarditis
Thrombocytopenia, anemia, neutropenia
Hepatitis
Pancreatitis, autoimmune diabetes
Vasculitis
Colitis
Interstitial nephritis, glomerulonephritis
Enteritis
Dermatomyositis
Myositis
Arthralgia, arthritis

What to do….

- You could phone a friend either locally (Sanjay and I are always happy to help!) or one of the very friendly oncologists in Barrie
- cancercareontario.ca Guidelines and Advice under “Browse Modalities” there is an immunotherapy toxicity toolkit for providers (and for patients)
- This page includes a wallet card similar to the fever card carried by patients on traditional chemotherapy
- Side effects are graded 1 through 4 depending on severity
- Mainstay of treatment for majority of these side effects is steroids


EXIT
HAKUNA
MA
TATAS

Elder abuse

Did you know there’s a hotline?

Thank goodness for Social Workers!

- A friend texted to ask what to do when a family member was expressing concern about elder abuse
- My answer :“elder abuse is tricky…let me walk down the hall to the social worker, she’ll know what to do”
- She did indeed. People can call this hotline and they will do an intake and determine which path to follow and next steps to take

Who are the people in your neighbourhood?

Connections that have made my life easier…and can help you too!


SESAME STREET

Aaron and Arya Sinclair

O.W.L Counselling

Own. Willful. Living.

North Bay Regional Health Centre
Centre régional de santé de North Bay

GENDER DIVERSITY CLINIC

What is a Gender Diversity Clinic?

This clinic provides outpatient psychiatric consultation and support to patients who are questioning or have come to understand that their gender identity differs from the one assigned to them at birth.

Who can be a patient at the clinic?

Patients of all ages from northeastern Ontario–our care team has expertise supporting children, youth and adult patients.

How can I become a patient at the clinic?

Speak with your health care provider and ask them to complete a referral form.

Alana and Anna Nuedling

The Hive on

East Elliott

Royal Victoria Regional Health Centre

RVH Oncology Team…friendly, reassuring and helpful voices on the other end of the phone!

Your friendly, neighbourhood

MAiD team….

References

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