



Clinical Assessment of the Oncology Patient with Emotional Distress

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Disclosures

With respect to the following presentation, there has been no relevant (direct or indirect) financial relationship between the party listed above (and/or spouse/partner) and any for-profit company which could be considered a conflict of interest.

Learning Objectives

- *Provide a framework that helps characterize mental distress*
- *Familiarize with somatic disorders associated with cancer care*
- *Learn tools that help structure the diagnosis of Psychiatric Disorders during Cancer*
- *Outline pharmacological guidelines*

A Framework for Cancer-Related Distress



Framework for Distress

Definition of Cancer Related Distress

“A multi-factorial unpleasant emotional experience of a psychological (cognitive, behavioral, emotional), social, and/or spiritual nature that may interfere with the ability to cope effectively with cancer, its physical symptoms and its treatment. Distress extends along a continuum, ranging from common normal feelings of vulnerability, sadness, and fears to problems that can become disabling, such as depression, anxiety, panic, social isolation, and existential and spiritual crisis.”

Framework for Distress

Importance of Acknowledging

- Addresses the core issue of stigma
- Normalizes the occurrence, the term is readily understood
- Facilitates communication and helps build trust
- It is inclusive and not limited to psychological problems



Framework for Distress

Cancer Threatens Every Level of Need at Once

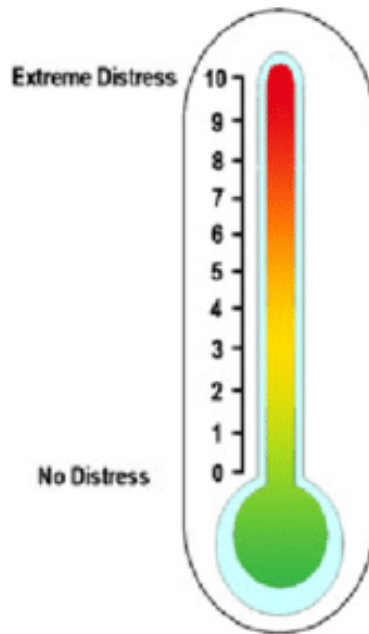
- **Physiological** — pain, fatigue, insomnia, appetite and nausea
- **Safety** — prognosis, income, insurance, job security
- **Belonging** — isolation, changed roles, fear of being a burden
- **Esteem** — body image, identity, loss of competence
- **Self-actualization** — dreams deferred, a foreshortened future



Framework for Distress

Measuring Distress

First please circle the number (0-10) that best describes how much distress you have been experiencing in the past week including today.



Second, please indicate if any of the following has been a problem for you in the past week including today. Be sure to check YES or NO for each.

YES NO Practical Problems

- ☐ ☐ Child Care
- ☐ ☐ Housing
- ☐ ☐ Insurance/financial
- ☐ ☐ Transportation
- ☐ ☐ Work/school

Family Problems

- ☐ ☐ Dealing with children
- ☐ ☐ Dealing with partner
- ☐ ☐ Dealing with close Friend/relative

Emotional Problems

- ☐ ☐ Depression
- ☐ ☐ Fears
- ☐ ☐ Nervousness
- ☐ ☐ Sadness
- ☐ ☐ Worry
- ☐ ☐ Loss of interest in usual activities

- ☐ ☐ Spiritual/religious concerns

YES NO Physical Problems

- ☐ ☐ Appearance
- ☐ ☐ Bathing/dressing
- ☐ ☐ Breathing
- ☐ ☐ Changes in urination
- ☐ ☐ Constipation
- ☐ ☐ Diarrhoea
- ☐ ☐ Eating
- ☐ ☐ Fatigue
- ☐ ☐ Feeling Swollen
- ☐ ☐ Fevers
- ☐ ☐ Getting around
- ☐ ☐ Indigestion
- ☐ ☐ Memory/concentration
- ☐ ☐ Mouth sores
- ☐ ☐ Nausea
- ☐ ☐ Nose dry/congested
- ☐ ☐ Pain
- ☐ ☐ Sexual
- ☐ ☐ Skin dry itchy
- ☐ ☐ Sleep
- ☐ ☐ Tingling in hands/feet

Other problems

Framework for Distress

Measuring is not Enough

- 20–52% of patients experience distress
- Great variability in tools used
- Without proper infrastructure, small number of patients receive care
- High prevalence also among family caregivers of patients with advanced cancer

Not seeing the forest for the trees: a systematic review of comprehensive distress management programs and implementation strategies. Current Opinion in Supportive and Palliative Care 14(3):p 220-231

Author	Referrals (% where reported)
Götz <i>et al.</i> 2019 [33]	One in four distressed patients agreed to a referral
Hamilton and Kroska 2019 [34]	24.5% of participants met the distress thermometer cut-off score, referral rates were not reported
Loth <i>et al.</i> 2018 [35]	Before this process, approximately 6% were successfully referred to psycho-oncology; with this process, 13.7% were successfully referred
Pearson and Melton 2020 [37 ^{***}]	Not available
Pichler <i>et al.</i> 2019 [38]	46.2% of all patients experienced elevated psychosocial distress, and 53.9% of those patients declined psychological support
Ploos van Amstel. 2019 [39 ^{***}]	25% of patients received a referral to a psycho-oncology service. Ten patients with anxiety and/or depression were referred to a psychologist. Nine patients with, for example, coping, family, or financial problems were referred to a social worker. One patient was referred to a sexologist. Three patients were referred to an expert center for cancer-related fatigue. Some patients had existing psychological support, which they continued during the study
Tondorf <i>et al.</i> 2018 [42]	Approximately 22% of all patients regardless of distress thermometer score accessed the psycho-oncology service

Framework for Distress

Factors affecting vulnerability

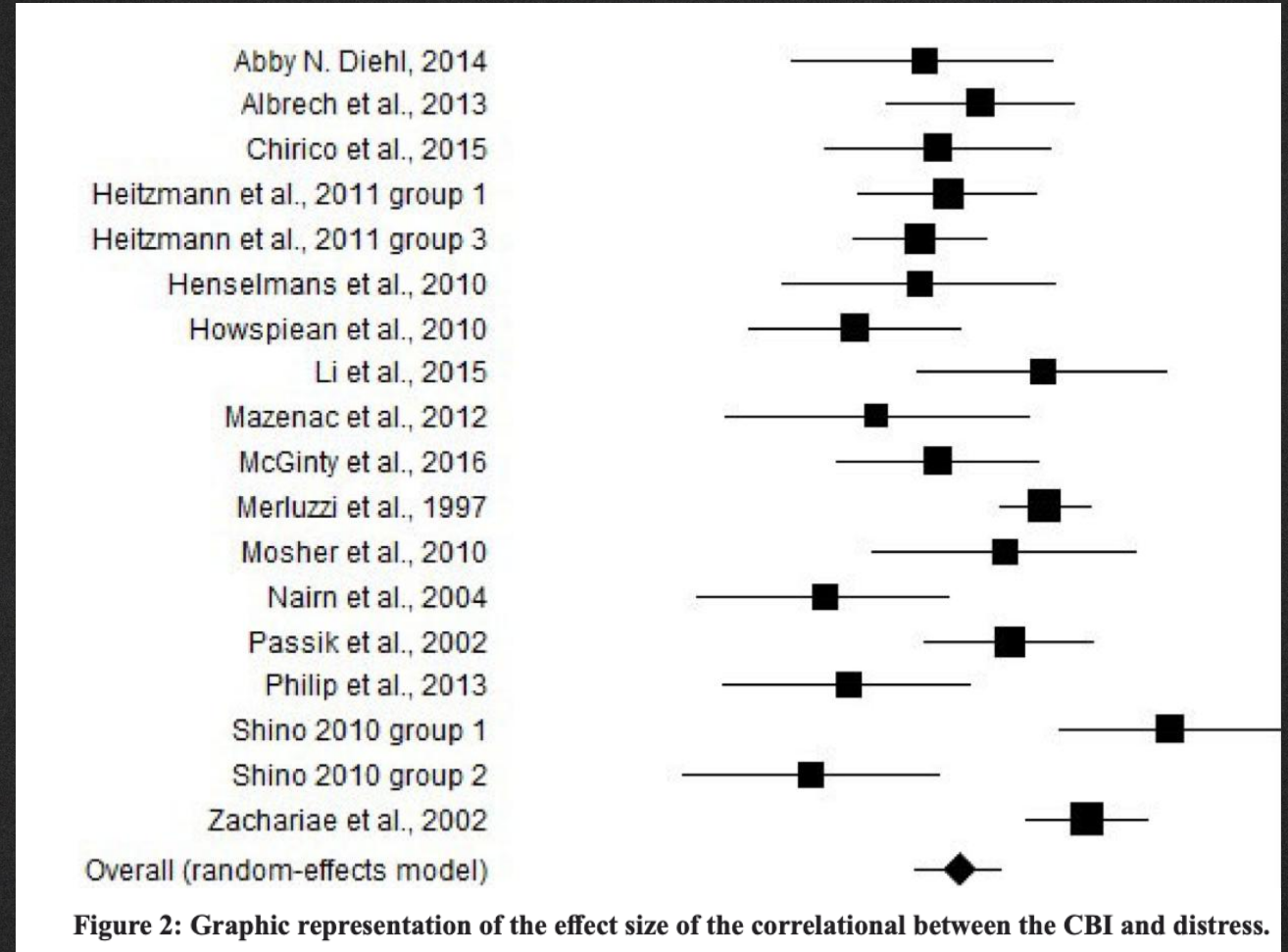
- Stage of emotional development
- Resilience and Self Efficacy
- Coping strategies
- Attachment style
- Psychosocial support



Framework for Distress

Factors affecting vulnerability

- Stage of emotional development
- Resilience and Self Efficacy
- Coping strategies
- Attachment style
- Psychosocial support



Chirico, 2017, Oncotarget, 8(22), 36800–36811

Framework for Distress

Factors affecting vulnerability

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Framework for Distress

Factors affecting vulnerability

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Predictors	<i>b</i>
Depression	
Final model	
No. of physical symptoms	0.20
Secure vs. preoccupied	1.87
Secure vs. dismissing	−0.20
Secure vs. fearful-avoidant	3.57
Death anxiety	
No. physical symptoms	0.42
Secure vs. preoccupied	3.54
Secure vs. dismissing	2.89
Secure vs. fearful-avoidant	6.57

Scheffold, 2018, Palliative & supportive care, 16(3), 308–316.

Framework for Distress

Factors affecting vulnerability

- Stage of emotional development
- Resilience and Self Efficacy
- Coping strategies
- Attachment style
- Psychosocial support



Framework for Distress

Helping the Distressed Patient: Goals

- Improve communication, respect and trust
- Generate alternative coping strategies
- Help reclaim personal control
- Improve morale and self-esteem
- Help patient gain independence



Framework for Distress

Helping the Distressed Patient: Basics

- Acknowledge distress and the experience
- Clarify diagnosis, Tx options and side effects
 - Ensure understanding
 - Educate and support through transitions
- Witnessing, Validation and Normalization
- Assist with problem solving
- Cognitive coping, reframing and modification
- NCCN survivorship lists CBT, existential therapy, and integrative approaches.

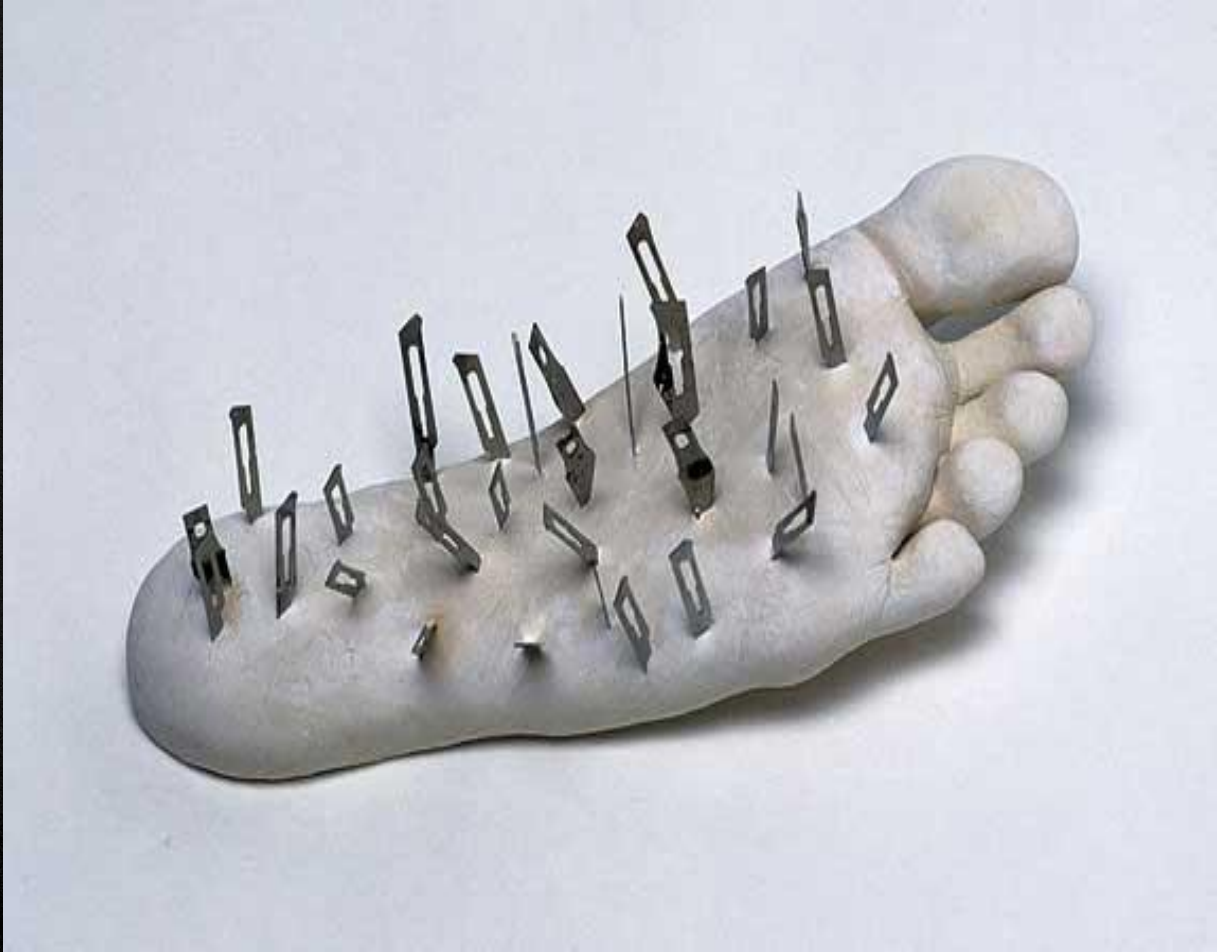


Physical Distress During Cancer



Physical Distress

Pain



- Most feared symptom
- Etiology and type of pain
 - Bone pain
 - Neuropathic pain
 - Pain from inflammation
 - Nerve compression
- Risk factors for undertreatment: children, elderly, women, minorities, hx of PSA or psych
- Treatment: Opioid + Non-Opioid + Pain modulator + CBT

Physical Distress

Fatigue

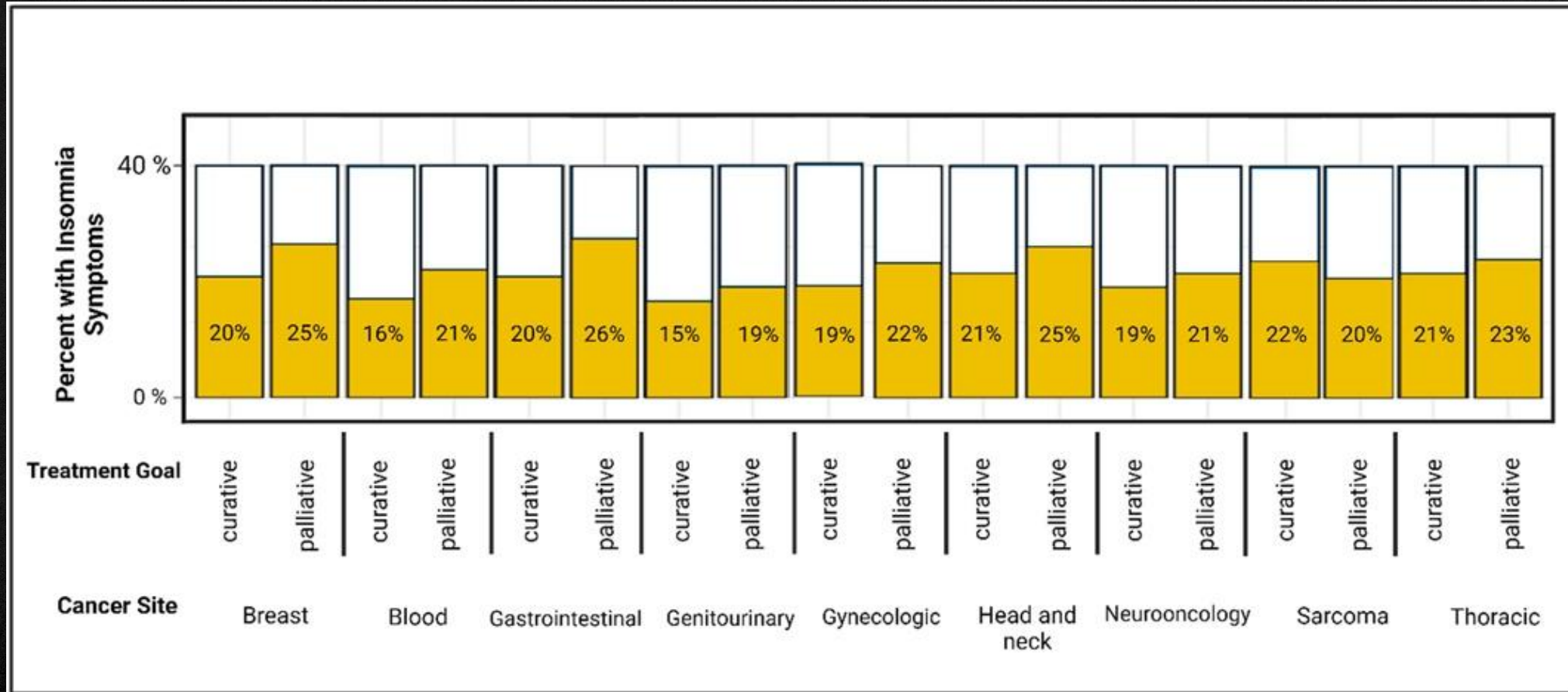


- Most prevalent and distressing symptom, more distressing than pain (Unger, 2025)
- Prevalence 50-90%, ~15–20% severe (Ernst, 2022)
- NCCN recommends a one-item, 0-10 scale: “Since your last visit, how would you rate your fatigue on a scale of 0-10?”
- First-line: Exercise, yoga, massage, CBT/CBT-I, MBSR, bright light therapy, acupuncture
- Pharmacologic: Methylphenidate modest and delayed (≥ 5 wk)

NCCN Guideline V2.2026 Cancer-Related Fatigue

Physical Distress

Sleep



Reporting of insomnia symptoms in patients with cancer undergoing treatment.

Levin 2005

Page 2024, *Psycho-Oncology*, 34: e70079.

Physical Distress

Sleep — Insomnia Is Common, Under-Treated, and Treatable

- **Prevalence:** $\sim 3\times$ the general population, $\sim 20\%$ meet criteria for insomnia disorder; persists into survivorship
- **Multifactorial:** distress, pain, chemotherapy, radiation and endocrine therapy, vasomotor symptoms, circadian disruption, maladaptive sleep behaviors
- **Under-treated:** only $\sim 50\%$ of affected patients receive any treatment
- **First line:** CBT-I, preferred over hypnotics; digital delivery is effective. Hypnotics and melatonin are adjunctive

Bergerot 2025, Psycho-Oncology, 34: e70171.

Physical Distress

Sexual Dysfunction



- Very high incidence, and little discussion about it
- Most commonly studied in breast and prostate cancer
- Factors affecting sexual function
 - Treatment related factors
 - Physical Changes
 - Psychological factors
- Sterility should be timely discussed

Diagnosing Mental Disorders In Cancer Patients



Diagnosis

Challenges

ANXIETY

DEPRESSION

Lonely

Terminology

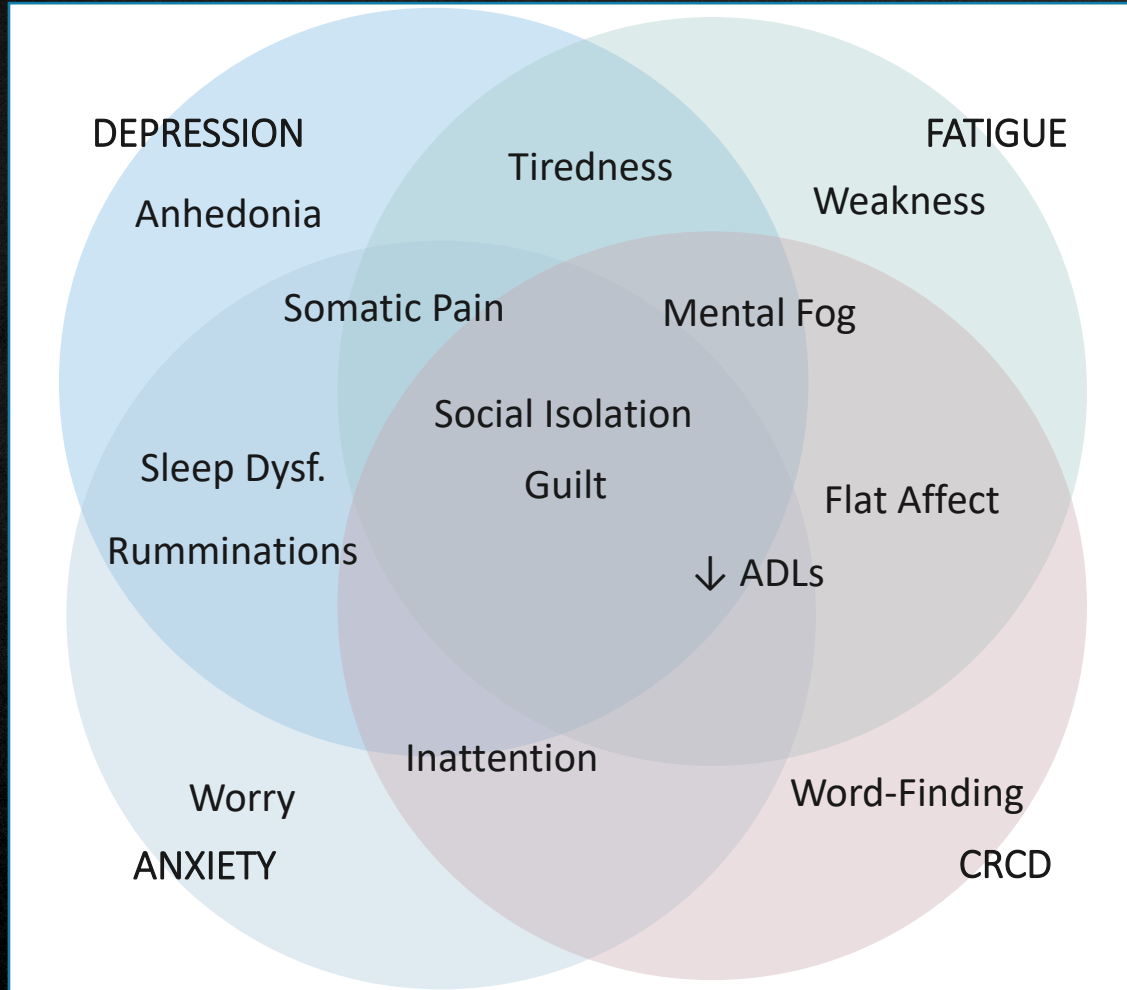
Overlapping Symptoms

Inconsistent Report

Stigma

Diagnosis

Challenges



Terminology

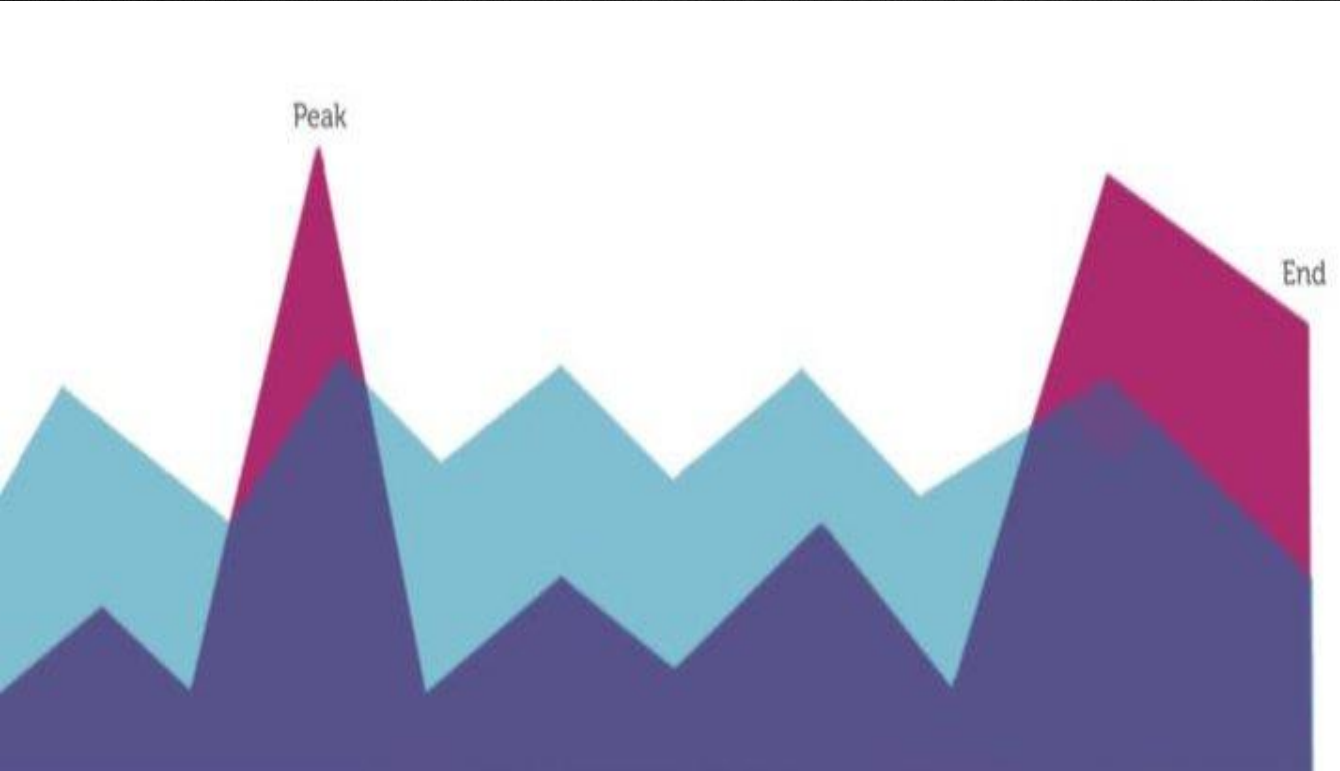
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Terminology

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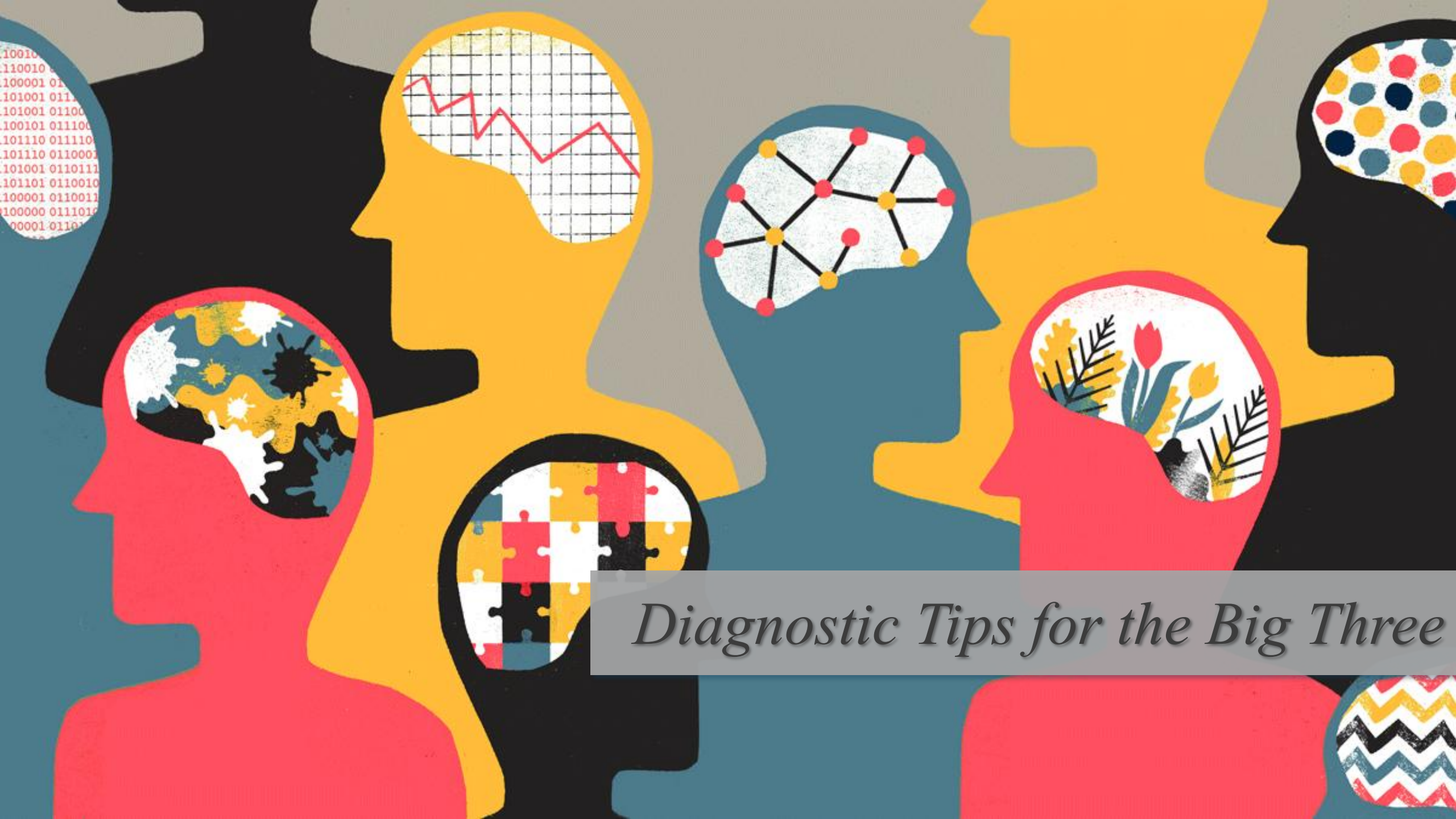


Terminology

Overlapping Symptoms

Inconsistent Report

Stigma



Diagnostic Tips for the Big Three

Diagnosis

Depression: Endicott Criteria

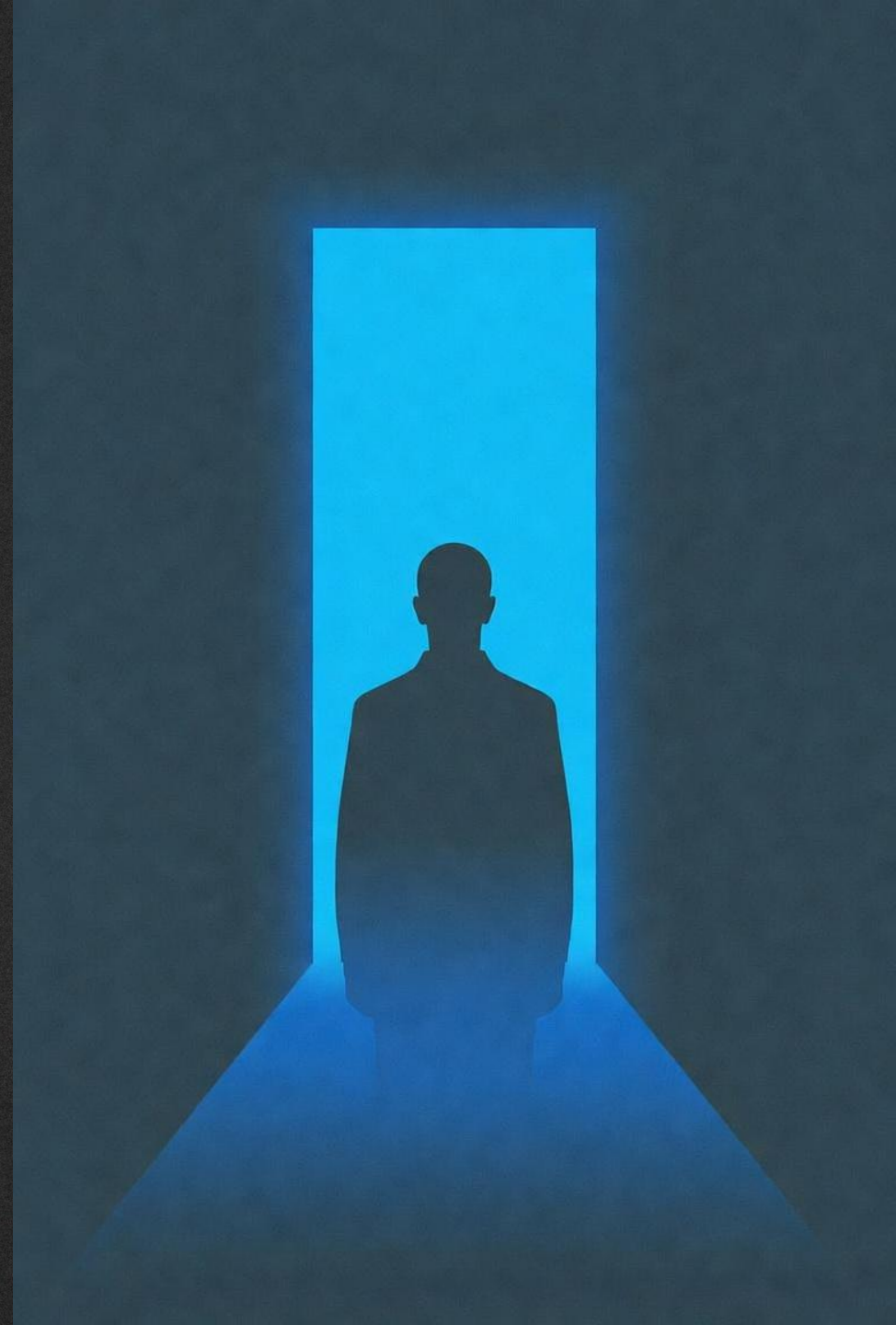
Physical Symptoms		Psychological/Cognitive Symptoms
Change in Appetite		Tearfulness Depressed Appearance
Sleep Disturbance		Social Withdrawal Decreased Talkativeness
Fatigue		Brooding Self-pity Pessimism
Psychomotor agitation/retardation		Lack of reactivity

Diagnosis

Demoralization: Distinct from Depression

- **Core construct:** hopelessness, helplessness, loss of meaning, subjective incompetence, feeling trapped
- **Not depression:** consummatory pleasure is intact; depression is pervasive anhedonia
- **Clinical stakes:** tracks suicidal ideation and desire for hastened death more closely than depression
- **Prevalence:** ~13–18%; rises with advancing disease and symptom burden
- **Treatment:** Meaning/Identity-focused therapy

Demoralization is hopelessness looking forward. Depression is anhedonia in the present.



Diagnosis

Depression: Suicide

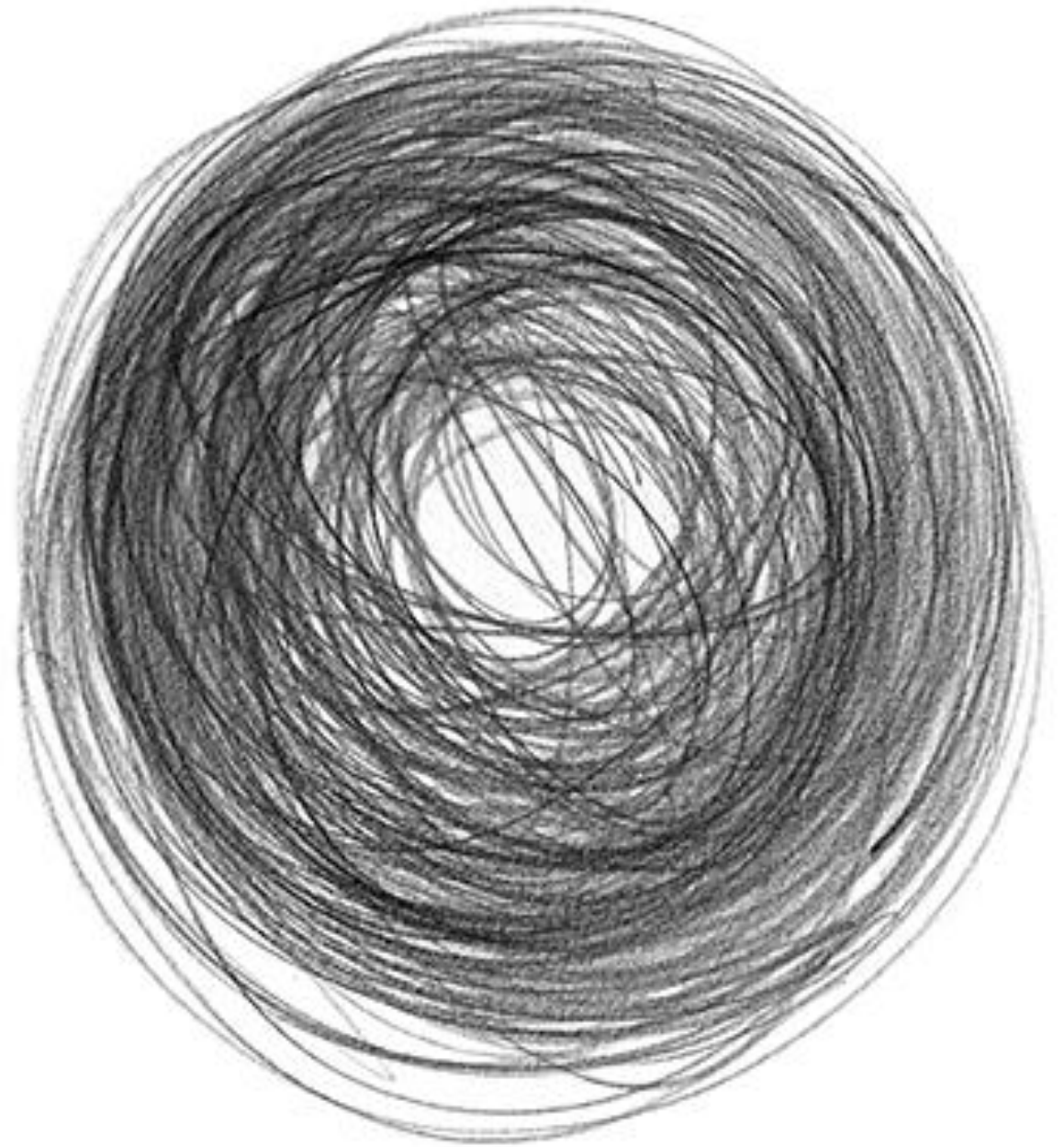


- The suicide rate among cancer patients is 4.4 times higher (Zaorsky, 2019)
- Men have more than double the prevalence ($\approx 2.2x$ higher) compared to women (Rafiei, 2024)
- Findings on Disease Site vary greatly
- Risk of completed suicide was higher within the six months of diagnosis (Lin Du, 2020)

Diagnosis

Multiple Shapes of Anxiety

- Situational anxiety
- Organic anxiety
- Psychiatric anxiety
- Existential anxiety



Stiefel F. Support Care Cancer. 1994 Jul;2(4):233-7.

Diagnosis

Teasing out Cognitive Impairment

- Chemotherapy Related Cognitive Dysfunction
- Delirium
- Major Neurocognitive Disorder

Short Term Memory

Word Finding

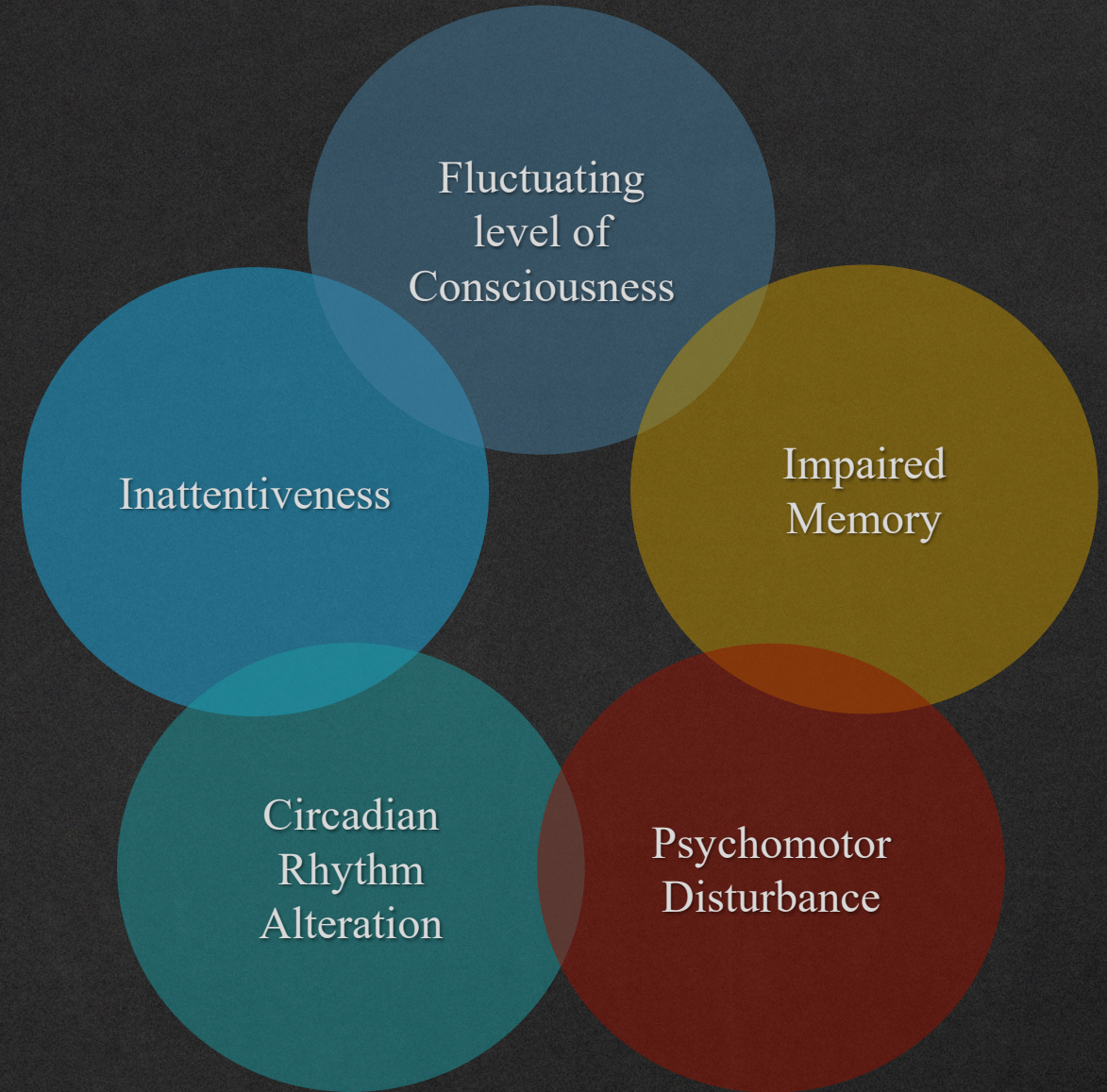
Planning and Multi-tasking



Diagnosis

Teasing out Cognitive Impairment

- Chemotherapy Related Cognitive Dysfunction
- Delirium
- Major Neurocognitive Disorder



Diagnosis

Teasing out Cognitive Impairment

- Chemotherapy Related Cognitive Dysfunction
- Delirium
- Major Neurocognitive Disorder

- Cancer and treatment increases risk
- It is not just about memory:
 - Learning and memory
 - Language
 - Executive function
 - Complex attention
 - Perceptual-motor
 - Social cognition
- Screening tool: MOCA test
www.mocatest.org
- Neuropsychological testing

Differential Diagnosis: Think Broad



Differential

Broad Approach



When encountering a Cancer patient with a neuropsychiatric symptoms:

- *Broad view to other disease contributors beyond psychological distress*
- *Develop a methodological approach to formulating a differential diagnosis*
- *Use all elements necessary for a multidisciplinary treatment approach*

Differential

CNS: Primary Impact

1

Toxic Leukoencephalopathies

*Relapsing Remitting focal symptoms –
Vision loss, weakness, rigidity
Relevant Sxs: Cognitive impairment,
Mood Swings, anxiety, fatigue*

2

Leptomeningeal Disease

*Headache, difficulty with walking, limb
weakness, seizures, dizziness and
sensorineural deafness
Relevant Sxs: **Confusion, Lethargy***

3

Immune-mediated Encephalitis

*Relevant Sxs: **Decreased alertness,**
focal Neuro sxs, **personality change,**
seizures, **encephalopathy, catatonia***

4

Cerebral Vasculitis

*Large-medium: Hemiparesis, **aphasia** or
focal neurological sx
Small: HA, **cognitive impairment** and
seizures
Systemic Sxs: Fever, **fatigue,** flu-like sxs*

Differential

Immune Effector Cell-Associated Neurotoxicity (ICANS)

- **Context:** neurotoxicity after CAR T-cell and bispecific engager therapy; ~15–62% by product and disease
- **Onset:** 4–10 days post-infusion, often with or just after CRS; usually self-limited over 5–17 days
- **Presentation:** encephalopathy, delirium, expressive aphasia and dysgraphia, tremor, myoclonus, agitation, psychosis; severe cases progress to obtundation, seizures, cerebral edema
- **Why it matters to CL:** aphasia and behavioral change mimic primary psychiatric syndromes — a falling ICE or MoCA is an early signal
- **Also recognize:** delayed BCMA-directed parkinsonism and cranial neuropathies; checkpoint-inhibitor encephalitis is a separate syndrome

ASTCT Consensus Grading

ICE score — 10 points

- Orientation
- Naming
- Following commands
- Writing
- Attention

Plus level of consciousness, seizures, motor findings, and raised ICP or edema. Graded by the most severe domain.

Management: supportive care plus corticosteroids. Tocilizumab does not resolve ICANS and may worsen it.

CAR T-CELL-RELATED NEUROTOXICITY GRADING

Immune Effector Cell-Associated Encephalopathy (ICE) Assessment Toolⁿ

- **Orientation:** orientation to year, month, city, hospital: 4 points
- **Naming:** ability to name 3 objects (eg, point to clock, pen, button): 3 points
- **Following commands:** ability to follow simple commands (eg, “Show me 2 fingers” or “Close your eyes and stick out your tongue”): 1 point
- **Writing:** ability to write a standard sentence (eg, “Our national bird is the bald eagle”): 1 point
- **Attention:** ability to count backwards from 100 by 10: 1 point

ICE Scoring

- 7–9, grade 1
- 3–6, grade 2
- 0–2, grade 3
- 0 due to patient unarousable and unable to perform ICE assessment, grade 4

ASTCT Immune Effector Cell-Associated Neurotoxicity Syndrome (ICANS) Consensus Grading for Adultsⁿ

ICANS grade is determined by the most severe event (ICE score, level of consciousness, seizure, motor findings, raised ICP/cerebral edema) not attributable to any other cause; for example, a patient with an ICE score of 3 who has a generalized seizure is classified as grade 3 ICANS.

Neurotoxicity Domain ^{aa}	Grade 1	Grade 2	Grade 3	Grade 4
ICE score ^{bb}	7–9	3–6	0–2	0 (patient is unarousable and unable to perform ICE)
Depressed level of consciousness ^{cc}	Awakens spontaneously	Awakens to voice	Awakens only to tactile stimulus	Patient is unarousable or requires vigorous or repetitive tactile stimuli to arouse. Stupor or coma
Seizure	N/A	N/A	Any clinical seizure focal or generalized that resolves rapidly or nonconvulsive seizures on EEG that resolve with intervention	Life-threatening prolonged seizure (>5 min); or repetitive clinical or electrical seizures without return to baseline in between
Motor findings	N/A	N/A	N/A	Deep focal motor weakness such as hemiparesis or paraparesis
Elevated ICP/cerebral edema	N/A	N/A	Focal/local edema on neuroimaging ^{dd}	Diffuse cerebral edema on neuroimaging; Decerebrate or decorticate posturing; or cranial nerve VI palsy; or papilledema; or Cushing's triad

ⁿ With permission from Elsevier: Lee DW, Santomaso BD, Locke FL, et al. ASTCT Consensus Grading for Cytokine Release Syndrome and Neurologic Toxicity Associated with Immune Effector Cells. Biol Blood Marrow Transplant. 2019;25:625-638. DOI: <https://doi.org/10.1016/j.bbmt.2018.12.758>. This article is published under the terms of the Creative Commons Attribution-NonCommercial-No Derivatives License (CC BY NC ND).

^{aa} Other signs and symptoms such as headache, tremor, myoclonus, asterixis, and hallucinations may occur and could be attributable to IEC engaging therapies. Although they are not included in this grading scale, careful attention and directed therapy may be warranted.

^{bb} A patient with an ICE score of 0 may be classified as grade 3 ICANS if awake with global aphasia, but a patient with an ICE score of 0 may be classified as grade 4 ICANS if unarousable.

^{cc} Depressed level of consciousness should be attributable to no other cause (eg, no sedating medication).

^{dd} Intracranial hemorrhage with or without associated edema is not considered a neurotoxicity feature and is excluded from ICANS grading. It may be graded according to CTCAE v5.0.

Note: All recommendations are category 2A unless otherwise indicated.

Treatment ([CART-9](#))

Differential

CNS - Secondary Impact

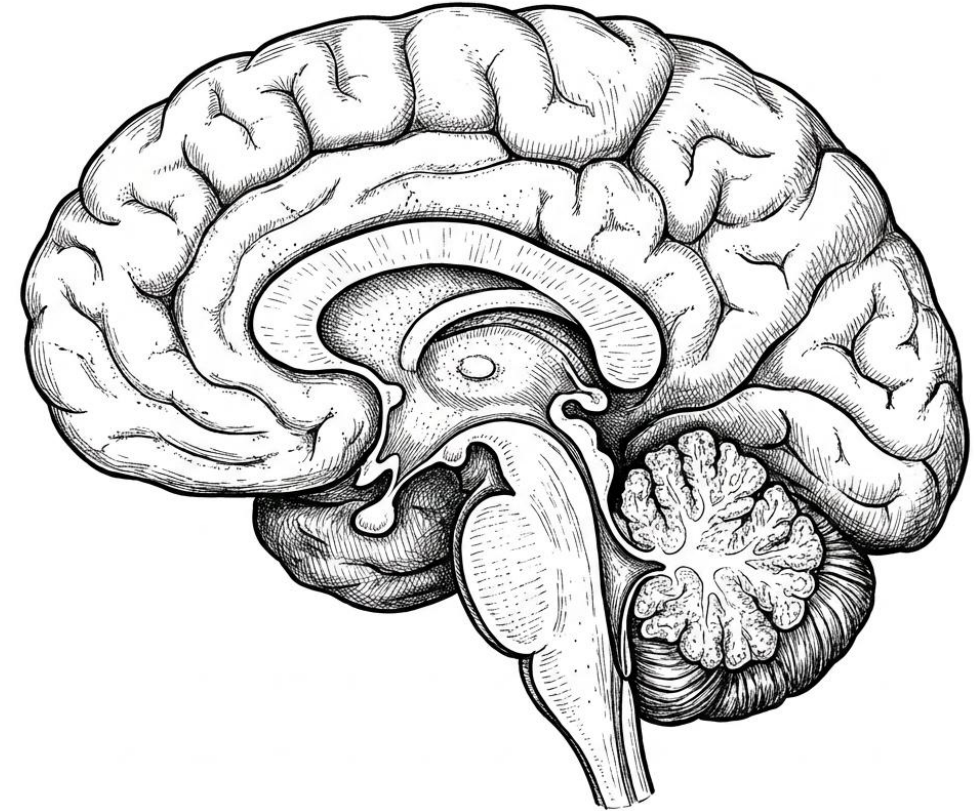
Infections

(Aspergillosis, HHV-6)

Lymphoproliferative and Second Malignancies

(Post-tx lymphoproliferative disorders;
treatment-induced malignancies, >10 years)

Posterior Reversible Encephalopathy (PRES)

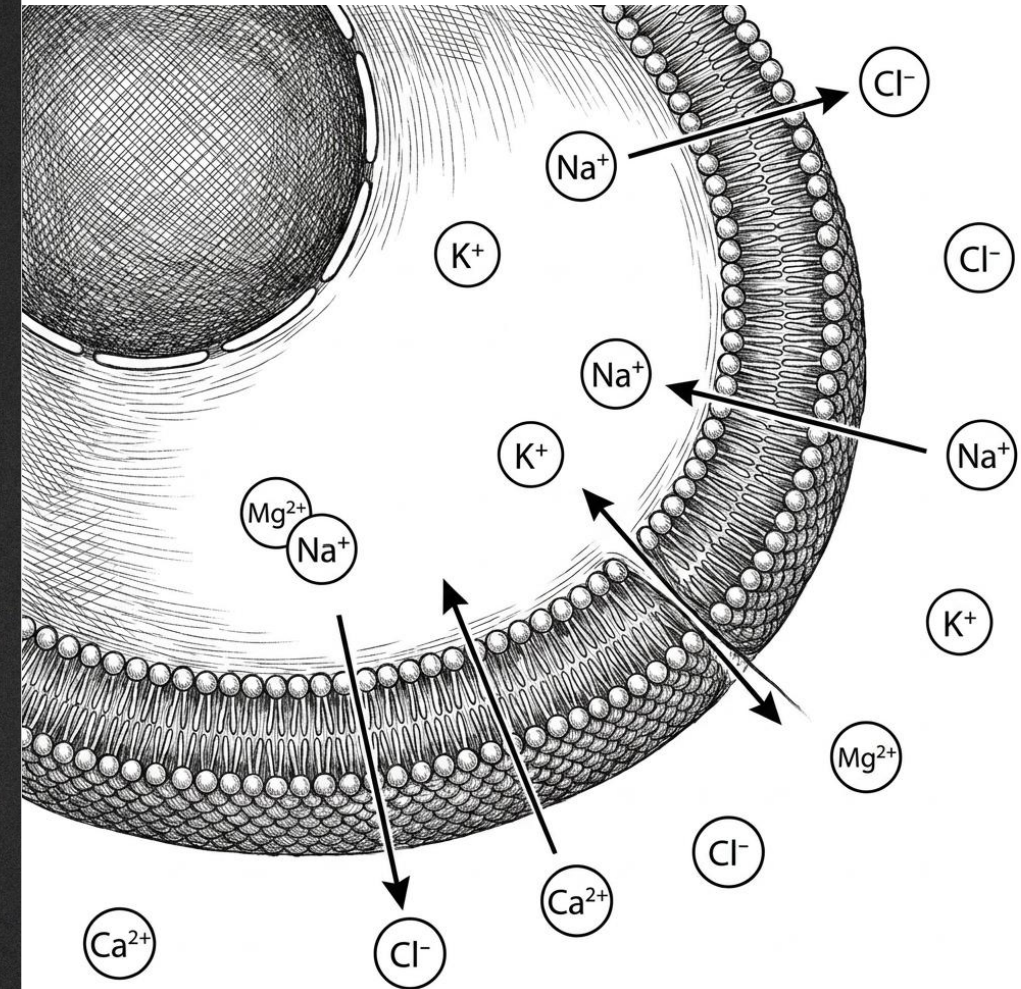


Differential

Chemical Abnormalities

Hyponatremia

- Paraneoplastic SIADH secondary to SCLC, NSCLC, mesothelioma, pancreatic, duodenal, and endometrial cancer, or lymphoma/leukemia
- Associated with lung infections, cerebral tumors, brain injuries, and medications
- Lethargy and confusion are attributable to cerebral edema

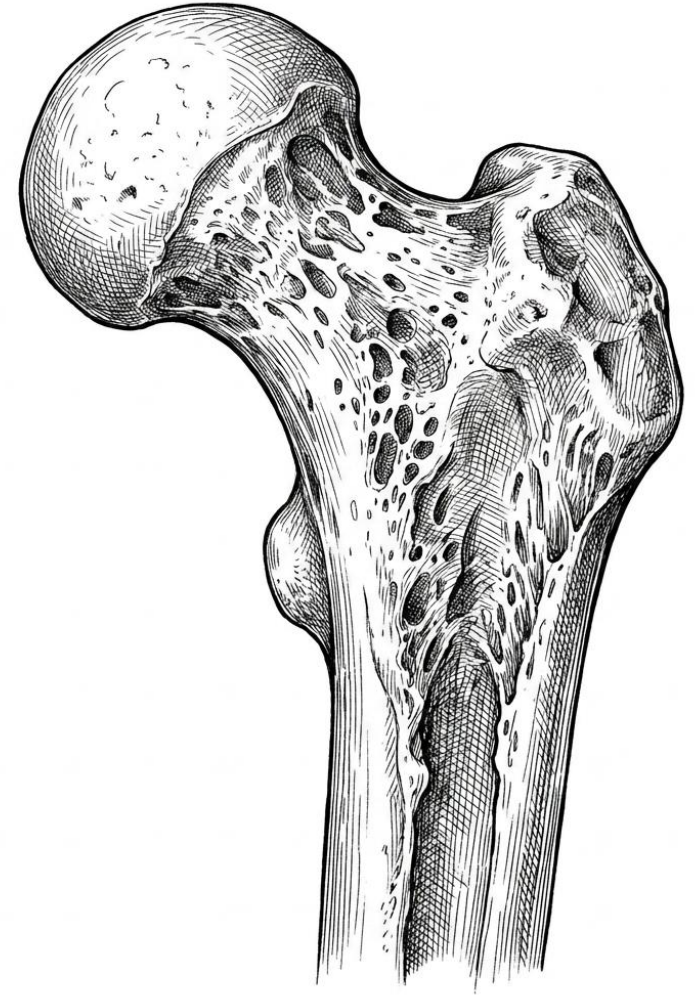


Differential

Chemical Abnormalities

Hypercalcemia

- Metastatic lesions to the bone or tumor-related ectopic production of parathyroid hormone-related protein
- Nausea, vomiting, constipation, and confusion, which can progress to coma and renal failure
- Treatment: diphosphonates, hydration, and diuresis

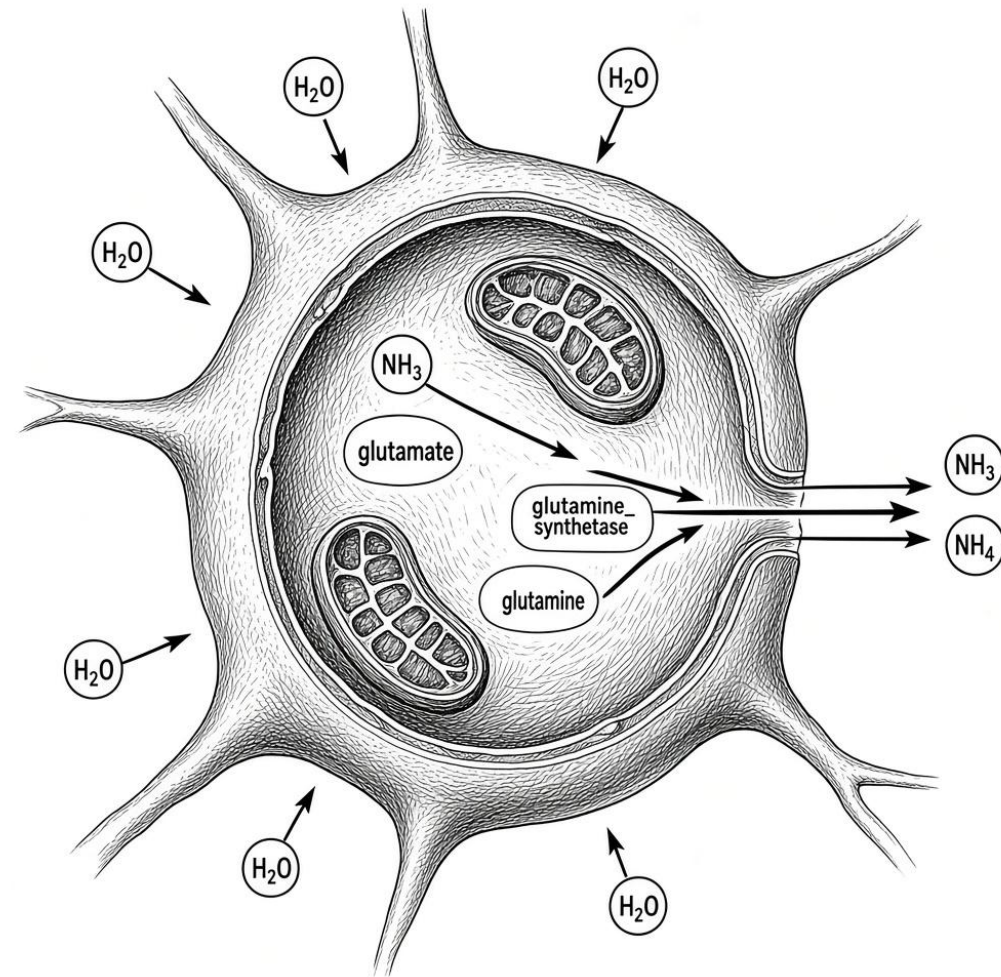


Differential

Chemical Abnormalities

Idiopathic Hyperammonemia (IHA)

- Plasma ammonia level $>2\times$ the upper limit of normal, with normal liver function tests
- Presents with lethargy, confusion, ataxia, and seizures; can progress to coma and death
- Seen in neutropenic hematologic malignancy patients following stem cell transplant, and in multiple myeloma patients

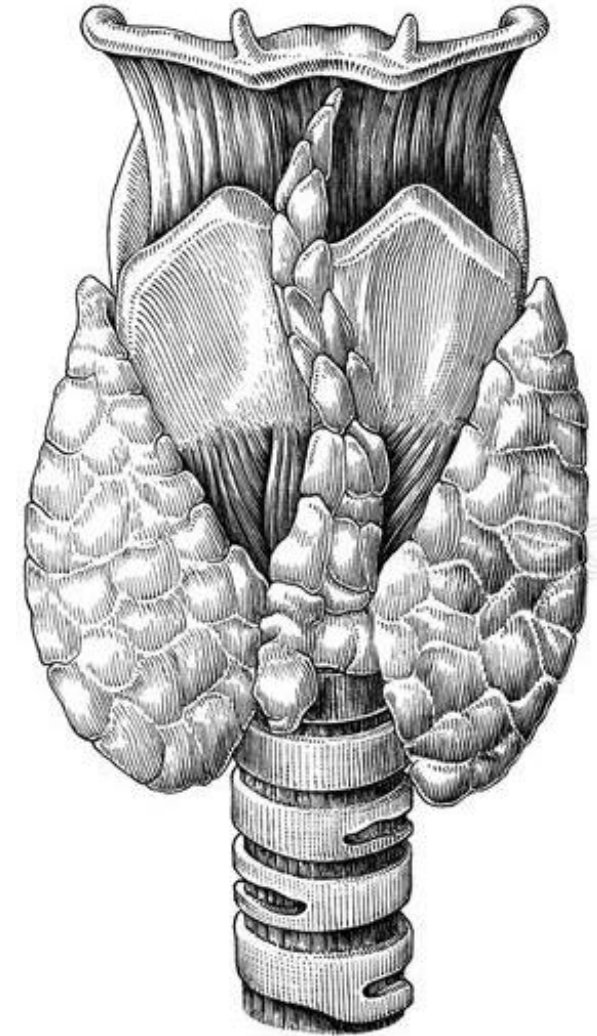


Differential

Endocrine

Thyroid Dysfunction

- **Symptoms:** fatigue, cold intolerance, low mood, hypersomnia, constipation
- **Risk factors:** TBI, busulfan regimens, Hodgkin's disease, younger patient age

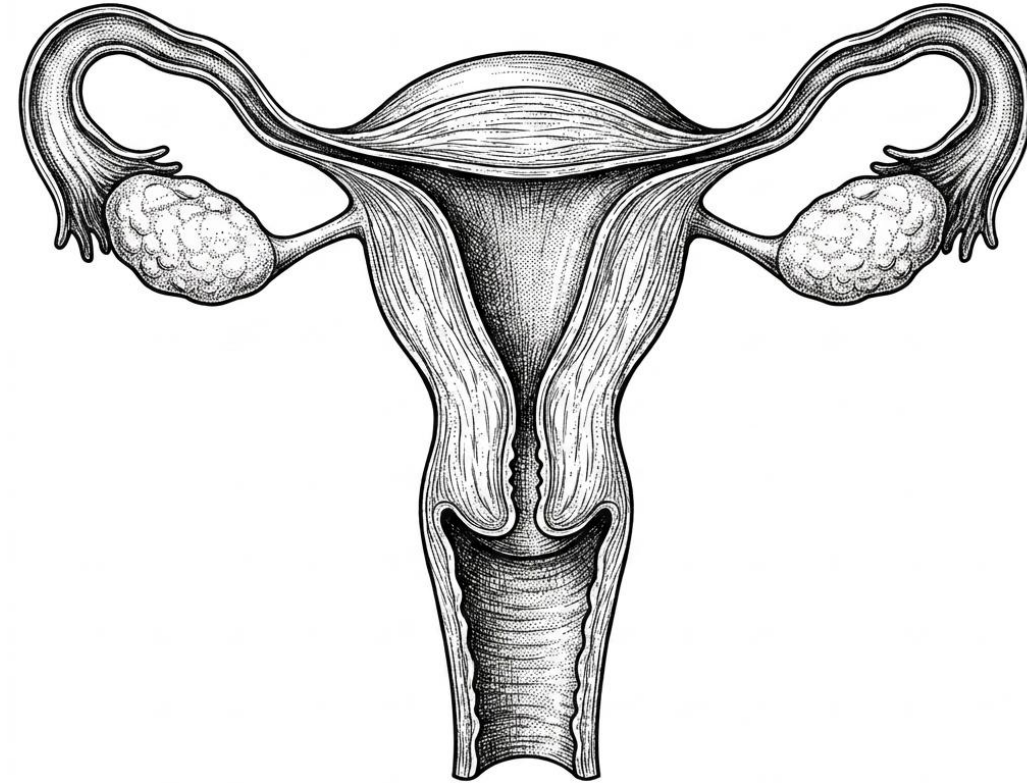


Differential

Endocrine

Ovarian Failure

- **Symptoms:** hot flashes, depression, mood lability, cognitive impairment
- **Risk factors:** alkylating agents, TBI, baseline ovarian reserve

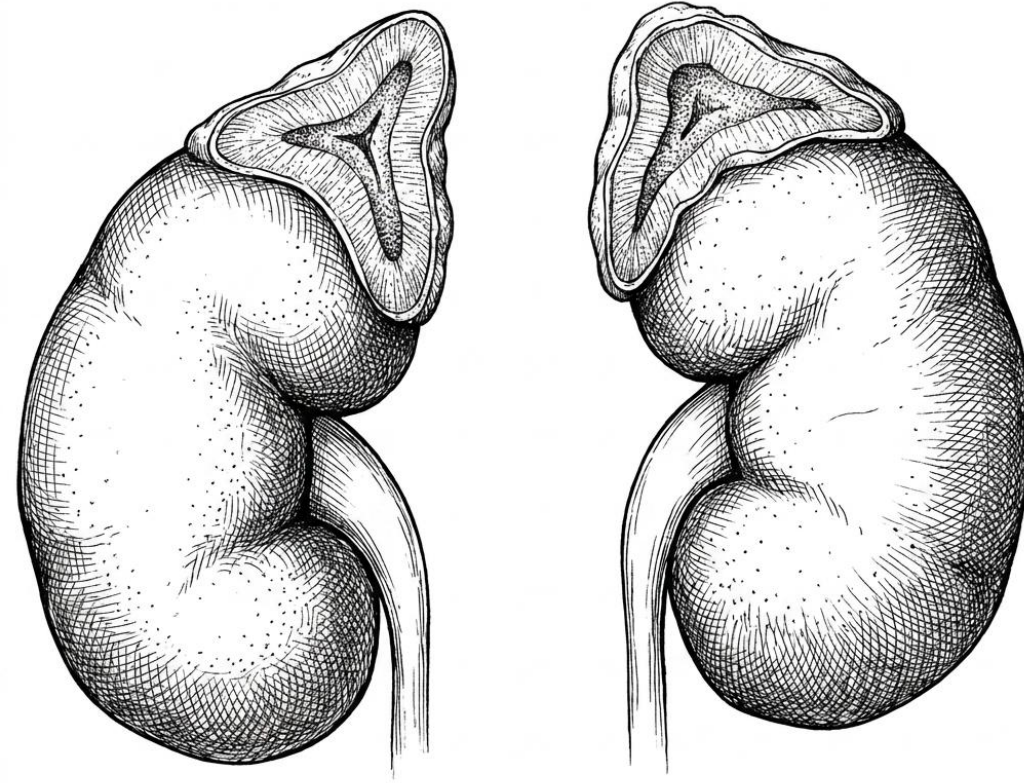


Differential

Endocrine

Hypoadrenalism

- **Symptoms:** fatigue, weight loss, decreased sex drive, nausea, craving salty foods
- **Risk factors:** more than 3 months of steroid therapy



Differential

Nutritional

- Vitamin B1: Wernicke's encephalopathy (ophthalmoplegia, ataxia, confusion); Korsakoff dementia
- Vitamin B6: Depression, confusion, fatigue, nausea, Anemia, susceptibility to infections, skin rashes or dermatitis
- Vitamin B12: Neuropathy, fatigue, cognitive impairment
- Vitamin C: Fatigue, fever, loss of appetite, bleeding gums, rashes, coiled hair, apathy, irritability, muscle weakness, and weight loss

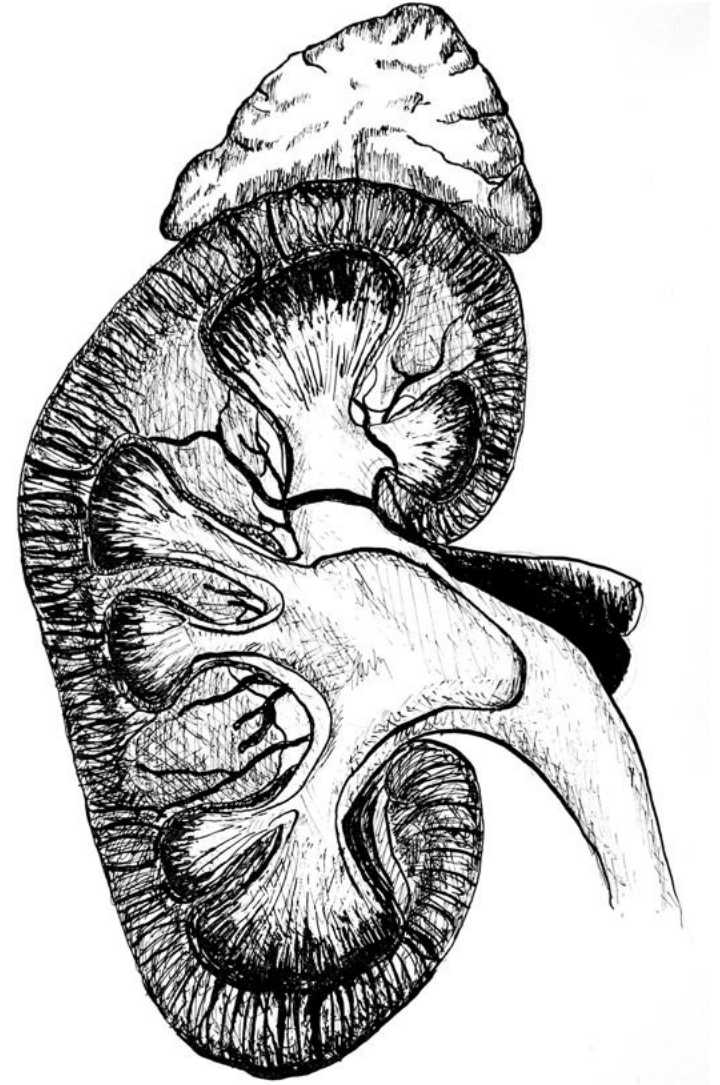


Differential

Other Organs

Renal

- **Pre-renal, renal, and obstructive causes** (e.g. hemorrhagic cystitis)
- **Uremia symptoms** – fatigue, nausea, loss of appetite, a metallic taste in the mouth, confusion

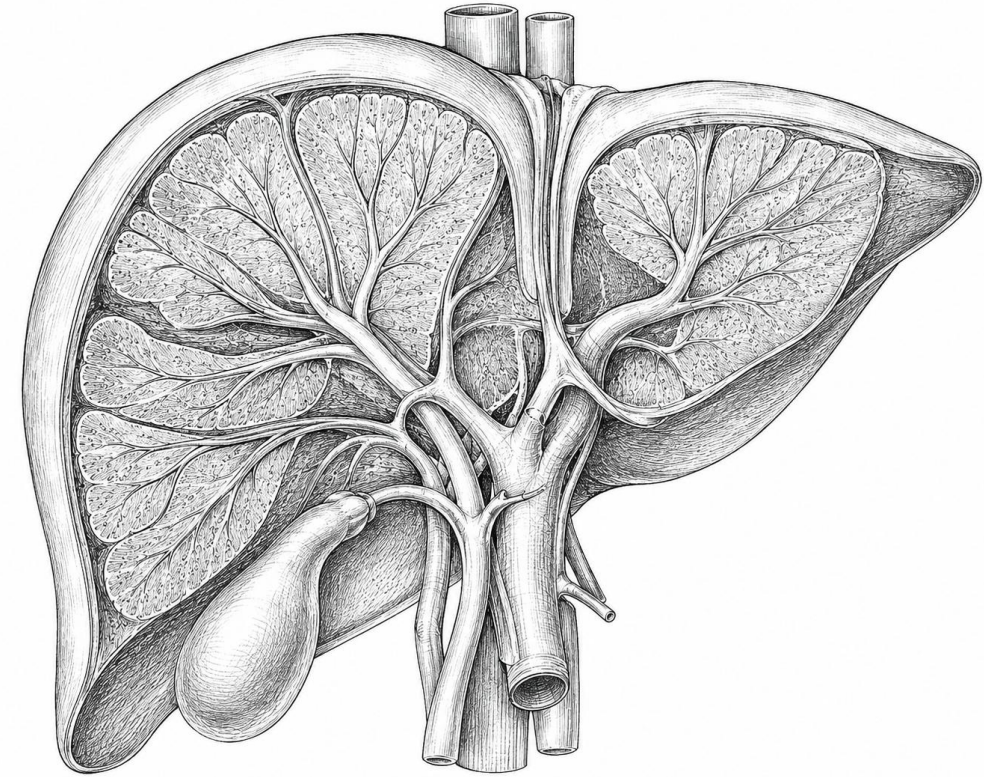


Differential

Other Organs

Hepatic

- **Sinusoidal obstruction syndrome** – edema, jaundice, hepatomegaly; delirium in severe cases
- **Autoimmune hepatitis** – fatigue, anorexia, hepatic tenderness, dark urine
- **Idiopathic hyperammonemia** – lethargy, motor dyscoordination, alkalosis

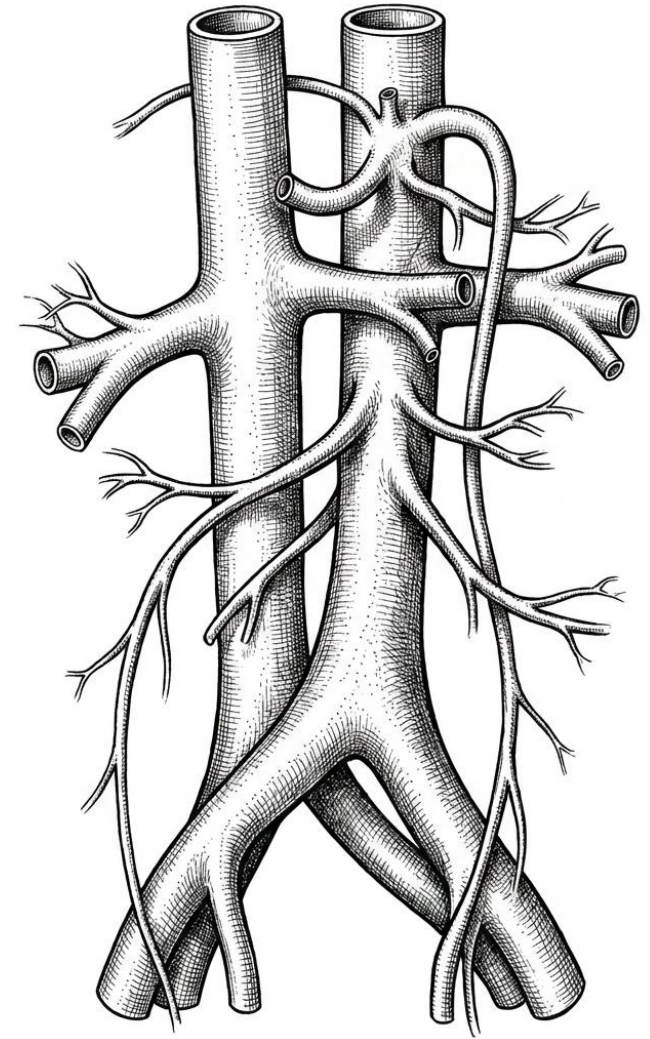


Differential

Other Organs

Vascular

- **Subdural hematomas** – from prolonged thrombocytopenia
- **Ischemic strokes**, thrombotic disease, or pulmonary embolism
- **Intraparenchymal hemorrhages**
- **Hyperviscosity syndrome** – triad of focal neurological changes, vision abnormalities, and bleeding



Differential

Pharmacology: Chemotherapy and Immunosuppressants (1 of 2)

Class / Agent	Neuropsychiatric effect	Key clue or management
Calcineurin inhibitors — cyclosporine, tacrolimus	PRES, confusion, tremor, ataxia, seizures	25–59% of HCT patients; reversible if withdrawn early
Antimetabolites — methotrexate	Leukoencephalopathy, headache, lethargy, dysarthria	IV or intrathecal; T2/FLAIR change; children and elderly
Cytarabine (high-dose)	Cerebellar dysfunction, seizures, encephalopathy	Cerebellar exam before each dose
5-FU / capecitabine	Acute cerebellar syndrome, confusion, somnolence, seizures	Leukoencephalopathy if combined with levamisole
Fludarabine	Acute toxic leukoencephalopathy	Delayed; may be irreversible at high dose
Alkylating agents — ifosfamide	Encephalopathy: hallucinations, agitation, EPS, seizures, coma	Acute and reversible; methylene blue
Busulfan	Seizures	Prophylaxis given with high-dose regimens
Thiotepa	Headache, encephalopathy, seizures, paresthesia	Dose-related
Platinums — cisplatin	Peripheral neuropathy, ototoxicity; seizures, PRES	Neuropathy and ototoxicity dominate; older age
Vinca alkaloids — vincristine	Peripheral and autonomic neuropathy, SIADH	Dose-limiting; fatal if given intrathecally

Differential

Pharmacology: Targeted, Immune and Supportive Agents (2 of 2)

Class / Agent	Neuropsychiatric effect	Key clue or management
Multikinase inhibitor — sorafenib	PRES	Associated with hypertension
Anti-CD20 — rituximab	PML	Rare, delayed, often fatal
T-cell engager — blinatumomab	Encephalopathy, aphasia, ataxia, tremor, seizures	Overlaps with ICANS; usually reversible
Checkpoint inhibitors — PD-1 / PD-L1 / CTLA-4	Autoimmune encephalitis, aseptic meningitis; confusion, memory loss	Neurologic irAE in ~1–3%; hold ICI and give steroids
Corticosteroids	Depression, mania, anxiety, psychosis, cognitive impairment, insomnia	~5–20%, dose-dependent; age, prior psychiatric illness
Cytokines — interferon-α, IL-2	Depression, encephalopathy	Screen mood before and during interferon
Antibiotics — imipenem	Seizures, tremor, vertigo, paresthesia, delirium	Lowers seizure threshold; renal dosing
Cefepime	Encephalopathy, headache, paresthesia	Renal impairment; EEG for nonconvulsive status
Antifungals — voriconazole	Seizures, visual changes, hallucinations, delirium	Visual and psychiatric effects often early
Amphotericin B	Headache, encephalopathy, visual changes	—
Antivirals — foscarnet	Headache, vertigo, paresthesia, seizures, delirium	Electrolyte derangement contributes
Ganciclovir	Headache, numbness, tremor, seizures	—

Therapeutics: One size does not fit all



Therapeutics

Treatment Modalities



Support/Psychoeducation

Empathic Listening / Support
Coping Skills / Problem Solving
Education and Insight



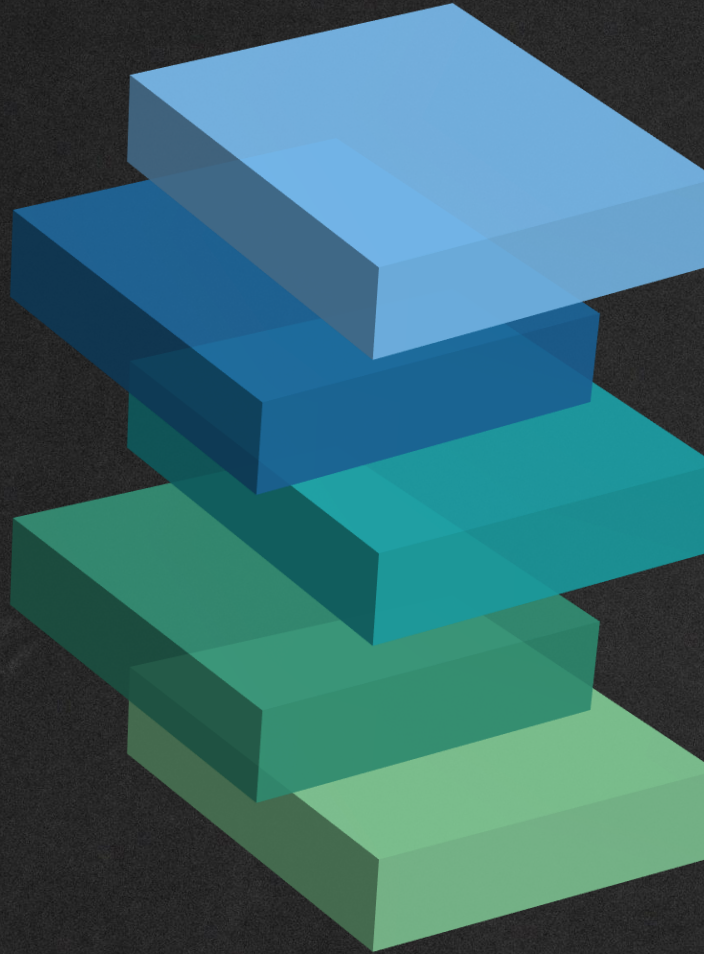
Psychotherapy

Cognitive Behavioral Therapy
Interpersonal Therapy
Psychodynamic Psychotherapy



Complementary Medicine

Body/Mind treatments
Supplements / Nutrition
Acupuncture



Psychopharmacology

Symptom Management
Disease Modifying



Somatic Therapies

Electroconvulsive Therapy
Transcranial Magnetic Stimulation
NMDA receptor antagonist



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GENERAL HOSPITAL

CANCER CENTER

HARVARD MEDICAL SCHOOL



Psychotherapy

Treatment Modalities

Meaning-Centered Psychotherapy (MCP)

- Targets existential distress
- Improves spiritual well-being, quality of life, and sense of meaning
- Reduces anxiety and desire for hastened death

Dignity Therapy

- Structured legacy and life-review interview
- Improves sense of dignity and spiritual well-being
- Improves quality of life near the end of life

CALM

- Short course for advanced cancer
- Symptom management and communication with the team
- Self and relationships
- Meaning and purpose
- Mortality and the future

CBT

- Reduces anxiety and depressive symptoms
- Anchors symptom-directed work: fatigue, insomnia, pain coping
- SMaRT Oncology trials: integrated collaborative care outperformed usual care for depression in cancer

ASCO guidelines recommend offering CBT, meaning-centered psychotherapy, dignity therapy, and life review in cancer palliative care.



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Pharmacology

Prescribing Considerations

- Protein binding
- Cytochrome P450 isoenzymes
- Pharmacodynamic Interactions



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Psychotropics > 90% bound	Psychotropics < 90% bound	Chemotherapies > 90% bound
Fluoxetine Sertraline Paroxetine Duloxetine Nefazadone Valproic Acid	Citalopram Escitalopram Mirtazapine Venlafaxine Bupropion Methylphenidate Carbamazepine Lithium	Etoposide-VP16 Teniposide-VM26 Paclitaxel-taxol Docetaxel-taxatere Tamoxifen



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<u>3A4 Substrates</u>	<u>Psychotropics active at 3A4</u>
Anastrozole	<u>3A4 Inhibitors:</u>
Doxorubicin	Fluoxetine
Cyclophosphamide *	Sertraline
Ifosfamide *	Nefazadone
Etoposide	Mirtazapine
Erlotinib (Tarceva)	
Teniposide	<u>3A4 Inducers:</u>
Vincristine	Carbamazepine
Vinblastine	Oxcarbazepine
Paclitaxel *	Modafinil
Docetaxel *	Topiramate
Tamoxifen *	
Tacrolimus	
*Must be metabolized to active compound	



Pharmacology

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<u>System</u>	<u>Adverse Reactions</u>
Cardiovascular	QTc Prolongation (AD, AP) Hypertension (SNRIs) Tachycardia (Stimulants)
Metabolic	SIADH (SSRIs) Diabetes/Hyperlipedemia (AP)
Neurological	Seizures (Bupropion) Movement Disorders (AP)
Hepatological	DILI (TCA, AED, CPZ, SNRIs) LFT ↑ (AP, Mirtazapine)
Renal	CKD (Lithium) Electrolyte imbalances

Pharmacology

Prescribing Considerations

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- Pharmacodynamic Interactions

<u>System</u>	<u>Better Agent</u>
Cardiovascular	QTc Prolongation (Sertraline) Hypertension (SSRIs) Tachycardia (Modafinil)
Metabolic	SIADH (Mirtazapine) Diabetes/HL (Aripiprazole)
Neurological	Seizures (SSRIs) Movement Dx (Quetiapine)
Hepatological	DILI (Escitalopram, SGA)
Renal	CKD (SGA) Electrolyte imbalances (Monitor)



Takeaways

- *Distress is almost universal, but not all distress is equal*
- *Acknowledging and educating is the first step in helping distress*
- *Simple interventions can go a long way*
- *Physical distress is within the realm of the CL Psychiatrist*
- *Differential MUST be broad*
- *Pharmacology is a balancing act*

A photograph of a modern glass skyscraper with a blue-tinted facade. A glass skybridge connects the building to another structure on the right. The building is situated on a city street with cars and pedestrians visible at the bottom. The text "Thank you!! Questions" is overlaid in the center in a white serif font.

Thank you!!
Questions