



Abuse / Neglect

CDC.Gov

“Child abuse and neglect is any act or series of acts of commission or omission by a parent or other caregiver (e.g., clergy, coach, teacher) that results in harm, potential for harm, or threat of harm to a child”

Commission : Physical, Sexual, Psych

Omission : Psychological, Emotional,
Medical/Dental, Educational,
Inadadequate Supervision
Exp to Violent Environments



Maltreatment types

Type of Abuse	Percentage
Neglect	74
Physical	18.2
Sexual	8.5
Psychological Maltreatment	5.6
Medical Neglect	2.1
Other	6.9

2016: Childwelfare.gov



Neglect	Physical, Emotional or Educational
Emotional Abuse	Attempt to destroy the child's self esteem
Physical Abuse	Deliberate infliction of harm
Sexual Abuse	Engaged in activities they cannot understand
Munchausen Syndrome by Proxy	Inducing symptoms for the perpetrators own personal gain



Mandated reporters:

Required BY LAW to report any suspicion of abuse or neglect.

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RED FLAGS

- Extremes of behavior
- Wary of physical contact
- Does not cry during procedures
- Sexualized behavior

- Inappropriate response to child's condition
- Changing stories
- Concealment of injuries
- Hostility
- Bypassed closer hospitals
- Tension between parents

TEN<4



Conditions Mistaken for Maltreatment

- Congenital Dermal Melanocytes
- Erythema Multiform
- Epidermolysis Bullosa
- Honoch-Schonlein Purpura
- Idiopathic Thrombocytopenia Purpura
- Osteogenesis Imperfecta



PSYCH DISORDERS

- Aggression
- Anxiety
- Bipolar
- Depression
- SI / HI
- Psychosis
- Crisis



Aggression

ANGER vs AGRESSION

Aggressive Characteristics

- Personal space
- Eye contact
- Gestures
- Posture



Factors Leading to Aggression

- Frustration
- Direct Provocation
- Noise / Crowding
- Physical Pain
- Psych Disorder
- Intoxication



Aggression Signs and Symptoms

- Behavioral
- Physical Signs
- Cognitive
- Psychosocial

Interventions

Safety / Self Awareness
 Therapeutic Comm.
 Emotionally Cathartic Activities
 Time Out
 Limit Setting
 Behavioral Contracts



Anxiety

A feeling of worry, nervousness, or unease, typically about an imminent event or something with an uncertain outcome.

5 Major Types of Anxiety Disorder

- General Anxiety
- OCD
- Panic Disorder
- PTSD
- Social Anxiety



Anxiety

Signs

- Elevated HR, BP
- Hyperventilation
- Cool / Clammy
- Hyperalert
- Pupil Dilatation
- N/V/D

Symptoms

- Chest Pain
- SOB
- Impending Doom
- Choking Sensation
- Poor Sleep
- Sexual Dysfunction

Level I, II, III, IV

Anxiety - Interventions

- Rule out organic causes
- Calm, acceptance, redirection
- Hyperventilation = Paper bag

Medications

SSRIs----- Prozac, Zoloft,
 Celexa, Lexapro, Paxil
 Benzodiazepines: -----Xanax, Klonopin, Ativan,
 Valium, Librium, Serax
 Anti Seizure meds:----- Neurontin, Lyrica
 Antihistamine.....Hydroxyzine:



Depression S & S

- Feeling sad / anxious / guilty / hopeless / helpless / worthless
- Pessimism, Irritable
- Loss of interest in hobbies
- Appetite / weight changes
- Poor concentration/memory/decision making
- Thoughts of death / suicide

RISK FACTORS



Anti-Depressants

- SSRI- Selective Serotonin Reuptake inhibitors
- SNRI- Serotonin and NorEpi Reuptake inhibitor
- NDRI- Norepi/Dopamine Reuptake inhibitor
- Tricyclic Antidepressant- Elavil, Nortriptyline
- Monoamine oxidase inhibitors
Marplan, Nardil, Parnate

SEROTONIN SYNDROME



Suicidal / Homicidal Ideation

- Definitions
- #1- Keep yourself Safe
- Recognize and Detect Risk
- Thorough interview
- Determine the risk
- Determine a plan
- Duty to Warn



Stress vs Crisis

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Stress: any uncomfortable emotional experience accompanied by predictable biochemical, physiological, and behavioral changes.

Crisis: an emotionally significant event or radical change of status in a person's life
Developmental : Situational : Existential



Crisis

- Crisis to Stress
- Management vs Intervention

Assessment	Interventions
Perception of events	Safety
Risk for self harm	Stay calm and empathetic
Hx and current meds	Est. rapport and trust
Family / Social issues	Allow pt to express feelings
Prior coping mechanisms	Offer simple choices
Existing support	Focus on problem solving



Psychosis (Schizophrenia)

- Loss of contact with reality
- Delusions
- Hallucinations
- Nonsensical Speech
- Inappropriate behaviors
- Depression / Anxiety
- Sleep disturbances
- Social Withdrawal

CAUSES
Schizophrenia
Bipolar (Mania)
Sleep Deprivation
ETOH / DRUGS
Medications

**Abilify, Clozaril, Latuda, Zyprexa,
Risperdal, Geodon, Seroquel**

Allergic Reactions

- Anaphylaxis
- Poison ivy
- Latex sensitivity

Anaphylaxis

- Acute allergen - reagin reaction
- Pathophysiology
 - Mast Cells and Eosinophils release:
Histamine, Bradykinin, and SRSA
- Manifestations
 - Local exposure → Urticaria → Bronchospasm
- Treatment-
 - MAINTAIN AIRWAY

RX for Anaphylaxis

- Airway
- Epinephrine
- H1 Blockers
- Steroids
- H2 blockers
- IV Fluids

Poison Ivy

- Contact Dermatitis from exposure to Rhus Radicans
- Symptoms
- Treatment

Latex Sensitivity

- Healthcare workers
- Susceptible patients
- General Population
- Latex-Fruit Syndrome
- Risk Factors
- Reactions
 - Hives – Itching
 - Anaphylaxis
- Only prevention is avoidance



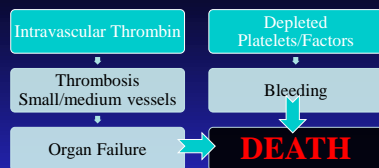
Blood Disorders

Sickle Cell
DIC
Hodgkins
Leukemia

Sickle Cell Crisis

- Hgb S vs Hgb A
- Cold / Stress / Hypoxia / Infection
- Cells Sickle
- Signs and Symptoms
- Acute Treatment
 - O₂

Disseminated Intravascular Coagulation



- Pathophysiology
- Symptoms
 - ↓ Serum fibrinogen-
 - ↓ Platelet count
 - ↑ Prothrombin time (PT)
 - ↑ Partial thromboplastin time (PTT)
- Treatment

Hodgkins : Cancer of the Lymphatic System

- Malignancy of lymph tissue
 - Lymph nodes
 - Spleen
 - Liver
 - Bone Marrow
- Signs
 - Diagnosed by Biopsy
- Treatment
 - Stages 1-4

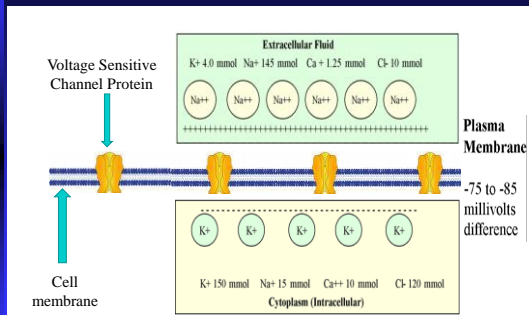
Leukemia

- Leukemia is a group of bone marrow diseases involving an uncontrolled increase in white blood cells (leukocytes).
 - Hairy cell leukemia
 - Chronic myelogenous leukemia (CML)
 - Chronic lymphocytic leukemia (CLL)
 - Acute lymphocytic leukemia
 - Acute nonlymphocytic leukemia (AML)

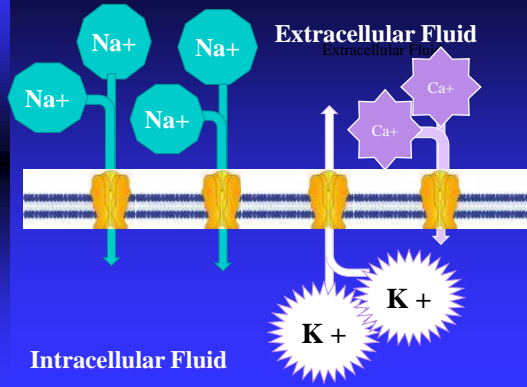
Electrolytes

Sodium	Na+	135-145 mEq / Liter
Potassium	K+	3.5-5.5 mEq / Liter
Calcium	Ca+	4.5-5.5 mEq / Liter
Phosphorus	Phos	2.5-5.5 mEq / Liter
Magnesium	Mg+	1.5-2.5 mEq / Liter

Electrolyte Movement / Cell Stimulation



Electrolyte Movement / Cell Stimulation



Sodium 135-145 mEq/Liter

Hypernatremia

- AKA hyperosmolarity
 - Cells shrivel as fluid moves from the intracellular space to the interstitial space
 - Etiology (How does it happen)
 - Symptoms
 - Treatment
- S**kin flushed
Agitation
Low grade fever
Thirst

Sodium 135-145 mEq/Liter

Hyponatremia

- Extra Cellular fluid has a decreased osmolarity
- AKA Water Intoxication
- Etiology
- Symptoms
- Treatment

Potassium : 3.5-5.5 mEq/Liter

Necessary for skeletal and smooth muscle contraction

Hyperkalemia

- Elevated serum K: Resting membrane potential is higher than threshold potential
- Skeletal muscle-
- Cardiac Muscle-
- Causes-
- Treatment:

Why is 6 afraid of 7?

Potassium : 3.5-5.5 mEq/Liter

Necessary for skeletal and smooth muscle contraction

Hypokalemia

- Cells become hyperpolarized and less reactive to stimuli.
- Skeletal Muscle
- Cardiac Muscle
- Causes
- Treatment
 - Correct hypo magnesium first

PO if optional
PIV- 10mEq/L
Central Line – 20 mEq/L

Calcium 4.5-5.5 mEq/Liter

Responsible for cell membrane permeability

HYPERCALCEMIA

- Inhibits depolarization of nerve and muscle cells
- Causes #1= Excess Parathyroid Hormone
- Symptoms
- Treatment
 - Urine Output 100-150 ml/Hr
 - Calcitonin

Calcium **4.5-5.5 mEq/Liter**
Responsible for cell membrane permeability

HYPOCALCEMIA

- Increased neuromuscular irritability
- Symptoms
 - Trousseau sign
 - Chvostek sign
- Causes
- Gluconate vs Chloride

Phosphorus **2.5-4.5 Mg/dl**

Component of ATP and required for almost all cellular processes.

HYPERPHOSPHATEMIA

- Symptoms depend on effect on Calcium Ions.
- Symptoms
- Causes:

Phosphorus **2.5-4.5 Mg/dl**

Component of ATP and required for almost all cellular processes.

HYPOPHOSPHATEMIA

- Clinical signs not often seen above 1.0mg/dl
- SIGNS
- CAUSES
- RX
 - Asymptomatic- Oral
 - Symptomatic- Parenteral

Magnesium 1.5-2.5 mEq/Liter

Depresses the release of Acetylcholine at the neuromuscular junction

Hypermagnesemia

- Depresses neuromuscular function
- Signs
 - Bp decrease
 - Urine output decrease
 - Resp rate decrease
 - Patellar reflex decreased
- Causes

Magnesium 1.5-2.5 mEq/Liter

Depresses the release of Acetylcholine at the neuromuscular junction

Hypomagnesemia

- Excessive Acetylcholine release
- Causes
- Signs
- RX



Which cardiac rhythm is associated with low Mag?

Diabetic Emergencies

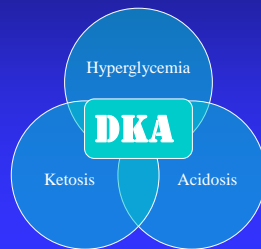
- DKA
- HHNK
- Hypoglycemia

DKA- Diabetic Keto-acidosis

- Glucose levels rise to 300-800 mg/Dl (May be higher)
- Ketones yield H⁺ Ions which decrease Ph
- Moderate to Severe- PH < 7.2
- (H⁺ ions) + Bicarb (HCO₃) = Carbonic Acid (H₂ CO₃)
- Breaks down into CO₂ and H₂O eliminated through the kidneys and lungs
- Na⁺ and HCO₃ loss through osmotic diuresis prevent the formation of Na HCO₃
- Respirations become deep and labored in the attempt to release carbonic acid in the form of CO₂
- H⁺ions shift intracellular and exchange for K⁺
- Extracellular H⁺ is taken into the cell as a buffer mechanism in exchange for K⁺

DKA- Diabetic Keto-acidosis

- Sign and Symptoms
 - Polyuria, polydypsia, polyphagia
 - Tachycardia, Hypotension, Kussmaul's respirations
- Treatment
 - Insulin
 - Hydration
 - Electrolytes



HHNK- (HHS)

Hyperglycemic Hyperosmolar Nonketotic Coma

- Seen in Type 2 Diabetics
- Glucos 300-6000 mg / Dl
 - The mortality rate estimate 60-70%
- Pathophysiology
- Signs
- Treatment

Thyrotoxicosis a.k.a. Thyroid Storm

- EXTREME EMERGENCY
 - 10-20% mortality (CDC)
- SIGNS
- TREATMENT

4

Myxedema

Extreme Hypothyroidism

- CAUSES
- Signs
 - Hypothyroid
 - Myxedema COMA
- Treatment
 - Levothyroxine (T4)
 - Liothyronine (T3)



Renal Failure

Inability of the Kidneys to maintain normal function



- Acute
- Chronic
 - Decreased Renal reserve
 - Renal Insufficiency
 - Frank Renal Failure
 - Uremia
- Monitor
 - Electrolytes
 - BP
 - Cardiac / EKG
 - I & O
- Watch for Shunts

Questions?