Pedia Ward Lecture

PEDIATRIC PAIN SCALE ASSESSMENT
1. Cries Scale
- Crying, requiring O2, sleeplessness, restlessness
- *Newborn to 6mos*

2. Flacc Scale
- *Infant to 3yrs old*
- Face, Leg, Activity, Cry, Consultability

3. Wong-Baker Faces Pain Rating Scale
- *3-7yrs old*

4. Numeric Pain Scale Asse
- PQRST
- 7 and above

5. Oucher Scale
- 7 and above

PNEUMONIA
- Inflammation affecting air sacs
- Unilateral/Bilateral
- Lower lobe (Severe)
- Cause: Pus, infection, viral, bacterial, fungal
- S/S: Cough, Sputum, (Yellow/Green) Fever

1. Group B Streptococcus (GBS) - mostly affects the *newborn*
2. Streptococcus Pneumoniae - *Infants (1-3mos)*
3. Microplasma Pneumoniae - *Older children to adolescents*
4. SARS-COV 2 - Covid vaccine originated from here
5. Haemophilus Influenzae Type B - Causes influenza

S/S:
- Poor feeding with cough and fever
- Irritability
- Altered mental status (desaturation)
- Chest retraction
- Tachypnea, Dyspnea, Grunting
- Hypoxia/Hypoxemia
- Nasal Flaring
- Chest Pain (Pleuritic Friction Rub)

Diagnosis:
- Auscultation (Crackles)
- Sputum Culture Sensitivity
- CBC
- Chest Xray
- Chest ultrasound/Chest CTScan

Treatment:
1. Antibiotic (Ampicillin, Gentamycin, etc)
2. Oxygen Supplementation
3.

Prevention:
1. Vaccination (PVC) - Children under 5
2. Flu Vaccine

Complications:
1. Sepsis due to massive infection
2. Pleural effusion
3. Atelectasis

ACUTE GASTROENTERITIS
- Infection of the digestive tract
- Critical in pediatrics

Causes:
1. Bacterial - E. coli, Staphylococcus Aureus, Salmonella
2. Viral - Norovirus, Rotavirus, Sapo V (Usually affects patients under 5 yrs)
3. Chemical Toxins
4. Certain Medication

S/S:
- Vomitting
- Diarrhea
- Fever
- Poor appetite
- Early Signs of Dehydration: No tears, no skin turgor, anorexia, sunken eyes/fontanel, lethargy

Treatment:
1. Hydration
2. Probiotics (Erceflora, Yakult, etc)
3. Medication (Omeprazole, etc) - Do not administer antidiarrheal to pediatrics
4. Vaccine (Rotavaccine)
5. Breastfeeding

PREMATURE NEONATES
- Before 34 weeks AOG
- Before 38 week =early term
- 24-33 weeks AOG: Corticosteroids
- Dexamethasone: Surfactant

Categories:
1. Late Pre-term: 34-36 wks
2. Moderate Pre-term: 32-34 wks
3. Very Pre-term: before 32 wks
4. Extremely Pre-term: before 25 wks

* Need: Mechanical ventilator, incubator, droplight
* IV is through umbilical catheter as long as umbilicus is attached

Medical emergencies that require early delivery:
1. Placenta Previa
2. Abruptio Placenta
3. Eclampsia
4. Twins/Triplets
5. Vaginal bleeding
6. Use of drugs/alcohol
7. Use of Sex (Semen induce early labor)

What happens:
1. Low birth weight (N: 2.5-3.5kg)
2. Breathing difficulties
3. Hypothermia
4. Thicker hair
5. Feeding difficulty
6. Small eyes or head
7. Soft ears with little cartilage
8. Undescended Testes - Small scrotum
9. Labia minora is exposed
10. Underdeveloped
11. Thin skin, shiny
12. Thin soles of feet, pink

Risk factors of premature birth:
1. Hispanic
2. Multiparity
3. Under/Overage of mother
4. Family History

5. Smoker/Drinker/Drug User
6. Under/Overweight
7. At risk for multiple Disorders
- Anemia
- Apnea of prematurity
- Protopulmonary Displacia due to not enough surfactant
- NB Jaundice - increase bilirubin
- Necrotisin Encolitis
- Neonatal Sepsis
- PDA: abnormal backflow
- Underdeveloped BV in eyes
- Heart issues
- Cerebral Palsy
- Learning disabilities
- Poor growth
- Poor social development

How to prevent:
- Avoid tobacco and alcohol
- Eat healthy and well balanced meal
- Start prenatal care
- Manage comorbidities
- Attend all prenatal check-ups
- Avoid or reduce stress levels
- Wait at least 18 mos after pregnancy (NSD) and 3 years (CS)

SPINA BIFIDA
- “split spine”
- 1st month of pregnancy
- Neural tube defect (doesn’t close properly)
- Often undetected
- Due to lack of Folic Acid

Types:
1. Occulta - Hidden, only shows in MRI, no protrusion, lower back dimple
2. Meningocele - Least common, should be referred to surgery (if no nerve damage, child can live normally)
3. Myelomeningocele - Most severe, has protrusion, SC is affected, possible nerve damage, possible urinary problem, IFC/Colostomy/Wheelchair dependent, risk for meningitis, has hydrocelphalus

Causes:
1. Unknown
2. Folic Acid Deficiency

3. Obesity
4. DM poorly managed
5. Anti-seizure medication

Diagnosis
- Blood test during 16-18th week of pregnancy
- Screening of AFP: 75-80%
- Can be detected during pregnancy
- Ultrasound
- Amniocentesis: elevated protein

Treatment:
1. Prenatal Surgery
2. Postnatal Surgery
3. IFC

CEREBRAL PALSY
- Neurologic condition
- Damage to brain during fetal development
- Non-progressive condition

Causes:
1. Prenatal
- exposed to radiation
- severe infection
- COVID
- Hypoxia
- Domestic Abuse
- Congenital Mutation/Malformation
2. Postnatal
- Head trauma
- Severe infection
- Hypoxia
- Meconium Aspiration
- Hyperglycemia
- Endgame of hyperbilirubin levels
- Stroke/brain bleed

Types:
1. Spastic - Spasm, uncntrolled, affects upper & lower extremities, meds: muscle relaxants, 70% of cases, upper motor neurons affected
2. Dyskinetic - uncontrolled movements
3. Mixed - mix of 2

Subtypes based on parts:
1. Diplegic - affects arms more than legs
2. Quadriplegic - affects 4 extremities
3. Hemiplegic - one sided
4. Monoplegic - one extremity only
5. Paraplegic - lower extremity

Terms:
1. Dystonia - random uncontrolled movement limbs and trunk
2. Chorea - hyperkinetic characterized by rapid and jerky movements
3. Splasticity
4. Hypertonia - abnormal increase in muscle
5. Hypotonia - decrease in muscle tone

Diagnosis:
1. MRI
2. CT Scan
3. EEG

Goal:
- Improve quality of life
- Interdisciplinary approach

Note: Has eating, sleeping, learning, speaking, and vision disability

Out-patient Department

High Risk Pregnancy

- higher complications

important or risk assessment:
- eclampsia: seizure (magnesium sulfate)
- pre-eclampsia (positive ketones & consistent high bp)

demographic:
- below 16 or above 35
- 20-30: child-bearing age
- overweight & underweight: risk weight
- height too small (mother) and baby too big: mother cant tolerate nsd: cephalopelvic disproportion

socioeconomic:
- poor (low nutrition/vitamis)

- overcrowded sa bahay
- smoker na kasama sa bahay
- nutritional deprivation

obstetric history:
- infertility
- multiple pregnancy: atony in the uterus
- supalpal sa mukha fam planning
- suggest implant & fam planning not only pills
- previous abortion: raspa leaves trauma sa uterus
- ectopic pregnancy
- stillbirth: patay na sa loob tas nilabas & fetal death (iufd): buhay lumabas tapos namatay
- emergency cs: cord prolapse
- forcep delivery
- previous iterine abnormality: problems sa uterus
- post mature prolonged labor, abnormal labor
- previous high risk infant, low birth weight, previous hydatiditiform mole

ob status:
- layer or no prenatal care
- maternal anemia, iron deficiency anemia: should drink ferrous sulfate
- placenta previa & ubrupto
- gestational hypertension
- gdm
- polyhydramnios
- prom: premature rupture of membrane (risk for infection)

maternal history:
- gestational diabetes
- anemia
- cardiac/pulmonary disease

metabolic
- gdm
- hyperthyroidism/hypo

endocrine disorder:
- pituitary and adrenal gland

repeated uti: infection (test baby for cbc)

habits:
- smoker / second hand (baby has asthma or cleft palate, etc)
- alcoholism

- drug use and abuse

laboratory test:
- anemia
- protenuria
- diabetes screening: oral glucose test (drink juice then test sugar)
- hepa b, syphylis
- hep b reactive si mother: baby will be given hep b vaccine and immunoglobulin hep b within 24 hrs

history & physical exam:
- >140/80 is hypertensive
- 19-15 bmi
- assess lmp

maternal & fetal monitoring:
- 1st and 2nd tri: every mo
- 7-8: every 2 wks
- 9m: every wk
- pacheck up palgi pag highrisk

post-coital: mga nagpreterm kasi naghard fuck sila ni mister