Alterations in GI/GU Endo and Anemia
Cleft Lip and Cleft Palate

- **Cleft lip**
  - Congenital anomaly involving one or more clefts of the upper lip
  - Can be as small as a dimple-nasal structure involved

- **Cleft palate**
  - Soft palate involvement to hard palate and portions of the maxilla
Causes of Cleft Lip/Palate

- Genetic, environmental, teratogenic factors
- Associated dental malformations, speech problems, frequent otitis media
- Cleft lip more common in boys
- Cleft palate more common in girls

Treatment
- Surgical correction of lip 1-2 mos
- Palate repair 6-18 months; stages
Nursing Care

- Maintain respiratory status and prevent aspiration
- Feed infant in upright position
- Feed slowly and burp frequently
- Lamb’s nipple or breast shield

- Use ESSR method
  - Enlarge nipple
  - Stimulate Suck
  - Rest after each swallow

- Facilitate grief response
- Encourage touching, holding, cuddling, bonding
- Community resources, parent support groups
Post Op Care of Cleft Lip/ Palate

- Monitor respiratory status
- No oral temps, straws, pacifiers, or fingers around mouth for 10 days
- Cleft lip resume preop feeding technique
- Palate – liquids from cup; feed from side of spoon
- Clean suture line- apply antibx ointment
- Position sidelying on unaffected side
- Pain assessment; infection
Pyloric Stenosis

- Muscles around pylorus hypertrophy and block gastric emptying
- Tx: pyloromyotomy
  - Creation of incision along pyloric muscle to relieve obstruction
Assessment

- Progressive projectile non bilious vomiting
- Movable palpable mass, olive shape RUQ
- Visible deep peristaltic waves LUQ-RUQ right before vomiting
- Irritability, hunger, crying
- Sunken fontanels, dry mucous membranes, decreased skin turgor and UOP
Assessment & Evaluation

- Watch hydration status
- Strict I&O
- NPO before surgery
- NG tube to suction
- Small frequent feedings, clear liquids 4-6 hours after surgery

- Infant exhibits adequate hydration
- Consumes age appropriate feedings and regains weight lost
- No s/s infection
- Parents actively participate in care
Gastroenteritis

- Second only to respiratory infections as cause of illness in children
- Diarrhea caused by a microorganism
- Self limited but count for a large # of hospitalization (dehydration)
Etiology

- Spread by the fecal oral route
- **Viral**
  - Rotovirus
  - Norwalk like viruses
- **Bacterial**
  - Salmonella, shigella, Camplobacter
- **Parasites**
  - Giardia
  - Cryptosporidium
Rotovirus

- **1st 48 hours**
  - Low grade fever
  - Anorexia
  - Vomiting

- **Day 2**
  - Watery diarrhea
  - Cramps
  - Can last up to 6 days
  - Massive stool output causing rapid dehydration
  - No blood in stool
Norwalk like viruses

- Fever, vomiting
- Abdominal cramps
- Watery diarrhea
- Rarely cause severe dehydration
- More often seen in adolescence and adulthood
NCP: Acute Gastroenteritis

- Nursing Diagnosis
  - High risk for infection
  - Fluid volume deficit
  - Altered Nutrition: Less than body requirements
  - Impaired Skin Integrity
  - Anxiety/Fear r/t separation, unknown procedures
  - Altered family processes
NCP: Acute Gastroenteritis

● Goals
  - Prevent the spread of Infection
  - Patient will maintain adequate hydration and nutritional status
  - Maintain skin integrity
  - Family will understand pt.’s illness and treatment
Assessment

- History - possible etiologic agents, allergic, dietary history
- Vital Signs
- Skin turgor
- Mucous membranes
- Mental status
NCP: Acute Gastroenteritis

- **Interventions**
  - Implement appropriate isolation and strict hand washing
  - Offer oral fluids, small frequent feedings, IVF as required
  - Monitor I & O, Specific gravity, weigh daily
  - Reintroduce foods as tolerated
  - Change diapers frequently, apply protective ointment, good skin care
  - Support and educate family
Congenital Renal Health Problems

- **Hypospadias**
  - Urinary meatus is located on lower underside of penis
  - Chordae - downward curvature

- **Epispadius**
  - U.M. is located on the upper side of the penis
  - Often associated with extrophy of the bladder
  - Neither interferes with voiding but could interfere with reproduction
  - Surgical correction begun before 18 mos
Acquired Renal Health Problems

- **Glomerulonephritis**
  - Limited activity, normal diet, no Na if HTN
  - Acute 2-3 weeks

- **Nephrotic Syndrome**
  - Bedrest, corticosteroid administration
  - Normal diet, no Na added
  - Chronic may have relapse
Alterations in Endocrine Dysfunction

- Diabetes Mellitus
Diabetes Mellitus

- Metabolic disease causing malfunction of carb, protein and fat metabolism
- Type I- IDDM; more common in children
- Type II- NIDDM may occur in over weight adolescents
- Destruction of insulin secreting cells of pancreas in the islet of langerhans
- Genetic, autoimmune response, environmental/viruses
Diabetes Mellitus

- Can’t digest carbs; fats and proteins are burned for energy resulting in carb build up causing hyperglycemia
- Polyuria, polydipsia, polyphagia
- Glycosuria, dehydration, fatigue, weight loss
- Metabolic acidosis/ketoscidosis
- Kussmal respirations-increase in depth and rate of respirations attempts to rid the body of excess CO2
Diabetes Mellitus - Assessment

- BG > 126 mg/dl fasting
- BG > 200 random
- Classic S/S:
  - Lethargy, confusion, dry skin, thirst, weakness, abdominal pain, fruity breath, decreased reflexes, ketonuria, glycosuria
- DX:
  - 8 hour fasting glucose
Planning/Implementation

- Emotional support to family and child
- VS-LOC, hydration, I&O
- Administer IVF, regulate electrolytes, acidosis, glucose monitoring
- Diet & Exercise
  - Low saturated fats, avoid concentrated carbs
  - Sufficient calories to meet G&D needs
- Glycosylated Hgb q. 3 mos
  - Normal 4-7%
Teaching

- Meal and snack planning
- Insulin administration: absorption rates, storage
- Blood glucose sampling, urine testing
- S/S hypo/hyper glycemia
- Treatment
Iron Deficiency Anemia

- Inadequate supply of iron
- Smaller RBCs, decreased RBCs and quantity of Hgb

**Causes:**
- Blood loss
- Poor nutritional intake
- Rapid growth causing increased demands
- Premature/multiple births
- After 6 mos poor intake of solid foods
Iron Deficiency Anemia

- **Signs & Symptoms**
  - Fatigue, pallor, irritability
  - Poor muscle development & growth retardation
  - Greater risk of infection

- **Prolonged Anemia**
  - Nail bed deformities, tachycardia, systemic heart murmurs
Interventions

- Correct bleeding
- Dietary modifications
- Promote rest
- Protect from infection

- Monitor cardiac function
- Transfuse RBCs-slowly
- Restrict milk intake
- Needs protein
- Needs Vitamin C
Iron Deficiency Anemia

- **Medications:**
  - Folic Acid
    - Aids conversion of Fe from ferritin to Hgb
  - Ferrous Sulfate
  - Absorb on empty stomach;
  - Give with OJ or Vit C source
  - Avoid milk products or antacids
  - Oral Fe preps will stain teeth
  - Side Effects: tarry stools and constipation
Iron Deficiency Anemia - Treatment

- Use Iron fortified cereals and formulas

- Iron rich foods:
  - Organ meats, dried legumes, nuts, green veggies, and iron enriched flours