Exam Review Topics

Emergency Management: Evaluation of the Critically ill or Injured Child, hypoxia is main cause of death on children.

Poisoning, Burns, and Injury Prevention: Ingestions (management, complications), Burns suggestive of child abuse, burn management

Cardiology: differentiate innocent murmur (Still’s) from pathologic. Cyanotic defects and management with prostaglandins. SVT.

Development: distinguish between a 2 and 3 year old

Dermatology: Rashes (tinea, eczema, viral, newborn), petechial eruptions, differentiating -Serum sickness, Scarlet fever, Stevens Johnson, Staph scalded skin, Kawasaki’s Disease.

Endocrinology: Hypothyroidism, SIADH (management), Diabetes Insipidus, breast development (benign gynecomastia), newborn thyroid disease (etiologies)

Fluid, Electrolyte, and pH Management: Acid/base questions regarding Renal Tubular acidosis, pyloric stenosis, DKA, and CAH

Gastroenterology: IBD/UC, IBS, NEC, volvulus, intussusception, abdominal masses, pancreatitis (etiologies)

Genetic Disorders: Congenital anomalies

Hematology: anemia (physiologic of infancy, iron deficiency, sickle cell, hemolytic), thrombocytopenia (ITP), eosinophilia, HUS, Spherocytosis, Polycythemia (etiologies and management in a newborn), G6PD deficiency.

Immunology, Allergy, and Rheumatology: food allergies, anaphylaxis, Kawasaki’s, HSP

Infectious Disease: HIV/AIDS (newborn testing), malaria, Hepatitis (which antibodies/antigens present), Standard Rx for Staph, Strep, Community Acquired Pneumonia, impetigo, cellulitis. Lyme Disease treatment (amox then doxy over age 8), Pharmacology and Treatment for a Family with meningitis, TB, Pertussis, Scabies, Chlamydia.

Neonatology: head lumps (cephalohematoma etc.), Newborn eye discharge, breastmilk jaundice vs. breastfeeding jaundice, causes of cholestatic jaundice (elevated direct bili).

Nephrology and Urology: UTI, Nephrotic syndrome (Minimal change disease), nephritic syndrome (post-strep GN), GU Reflux, hydronephrosis, urethral stricture, hematuria, undescended testicles, hypospadius, epididymitis, torsion, posterior urethral valves, inguinal hernia

Neurology: Guillain-Barre, Cerebral Palsy, TaySachs, Infant reflexes (Moto, rooting, suck, babinski), febrile versus pathologic seizure

Nutrition: Vitamin D deficiency/rickets, management of lead exposure, iron deficiency anemia

Oncology: ALL, Hodgkins, Chest and abdominal masses (neuroblastoma, wilm’s tumor, terrible t’s)

Ophthalmology/ENT: Amblyopia, Strabismus, Sleep Apnea, Neck masses
Orthopedics: SCFE, Osgood schlatter, syringomyelia, SMA, duputryn contracture, DDH, reactive arthritis, approach to a limp, bony lesions, starburst pattern, spiral fx in infant

Psych/Ethics: child abuse, dysthymia vs. depression

Pulmonology: Management of upper airway obstruction, mechanisms of asthma, Kartagener’s, Sarcoid, Alpha 1 antitrypsin deficiency, Croup (mechanism)

Adolescent Medicine: Adolescent gyn (muellerian anomaly presentations, menstrual cramps, endometriosis)

Test Taking Strategies

“List style” questions at end of test are often easier... so might consider doing them first.

Don’t get bogged down in a question that seems super complicated and you don’t know the answer. Circle it and come back if there is time.

Always check wording of question if the answer you expect is not there...

Narrow down to best 2 possible answers then go with your gut
Pediatric Buzz words

Fitz-Hugh-Curtis syndrome: perihepatitis with GC and Chlamydia- a complication on PID

Maternal alpha feto-protein: elevated with multiple gestations, neural tube defects, gastroschisis. Low with trisomies 21&18

Cat’s litter box: toxoplasmosis (microcephaly, hydrocephalus, intracranial calcifications, chorioretinitis, & seizures)

Kitten scratch: Bartonella henselae, cat scratch disease with cervical adenitis

“blue spot”: torsion of the appendix testis

floppy baby: trisomy 21, infant botulism, Prader-Willi

bilious emesis: obstruction/malrotation

short stature and amennorhea: Turner’s syndrome

acrocyanosis: blue hands and feet only – can be normal in a newborn

bulging fontanelle: increased ICP (hydrocephalus, meningitis)

“bag of worms”: varicocele

projectile vomiting: pyloric stenosis

Brushfield spots: on irises in Down’s Syndrome

Leukocoria: white pupil (retinoblastoma, cataracts, etc.)

bowel sounds in the thorax/scaphoid abdomen: congenital diaphragmatic hernia

diminished femoral pulses: coarctation of aorta

newborn abdominal mass: most common is an enlarged kidney, but also consider neuroblastoma

macrosomia: infant of a diabetic mother, postmature infants, & Beckwith-Wiedemann

asymmetric Moro reflex: complete clavicular fracture

post-dates gestation (41-42 weeks): meconium aspiration syndrome, peeling skin

meconium ileus: cystic fibrosis

high bilirubin at birth

breastmilk jaundice/breast milk jaundice: breastmilk is within first week (not enough milk) & breastfeeding peaks weeks 2/3.

ground glass infiltrates: hyaline membrane disease

synagis: Palivizumab- preventive RSV immunglobulin

night terrors: toddler or school age child wakes screaming from sleep but does not remember event

hypochloremic metabolic alkalosis: pyloric stenosis

rachitic rosary: Vit D deficiency/Rickets – enlarged nodules around sternum
DTP/DTaP/Td/Tdap: DTP (more side effects), DTaP (give under age 7), Td and Tdap (give over age 7)

Live attenuated vaccines: MMR, VZV, OPV, nasal influenza, small pox, and typhoid

Gray baby syndrome: chloramphenicol side effect

N-acetylcysteine: antidote for Tylenol ingestion

EDTA/DMSA: chelates lead

Desferoxamine: removes iron

Stocking glove distribution burn: suggestive of abuse if no splashmarks – means held in scalding water

Spiral fracture in nonambulatory child’s lower extremities, posterior rib fractures, metaphyseal “chip” fractures, retinal hemorrhages: Suggestive of abuse

Skeletal survey: check when concerned about child abuse

Patau’s Syndrome: trisomy 13

Edward’s Syndrome: trisomy 18

Atlantoaxial subluxation: C1/C2 instability seen in Down’s Syndrome

Craniosynostosis: fused suture lines leading to profound head asymmetries. Needs surgical correction.

Amniotic band syndrome: fibrous strands of membranes across chorionic cavity associated with abdominal trauma/cvs

Potter’s syndrome: bilateral renal agenesis (pulmonary hypoplasia, skeletal anomalies, characteristic facies-flat nose)

Neonatal E. Coli sepsis associated w/...: galactosemia

Lesch-Nyhan syndrome: X-linked recessive disorder of purine metabolism causing self-injurious behavior

Thrombocytopenia/eczema/frequent infections: Wiskott Aldrich Syndrome

Absent thymic shadow/hypocalcemia: DiGeorge Syndrome

Skin infections/leaks can’t reduce nitro blue tetrazolium: chronic granulomatous disease

Low complement levels (C3 vs C4): lupus nephritis and post-strep GN versus HSP and minimal change disease

Job syndrome: Hyper IgE

#1 pathogen for newborn sepsis: Group B Strep (early and late)

fever, rash, and toxic: Meningococcemia

Waterhouse Friedrichsen syndrome: adrenal hemorrhage in meningococcemia

Most commonly transmitted virus prenatally: CMV

Dew drops on a rose petal: Varicella

Rash in varying stages vs. all in one stage: Varicella
Koplik spots: measles (on buccal mucosa)
Antibiotic rx for a bite: Augmentin (amoxicillin/clavulanate)
Cat bite: pasturella multocida
Foot puncture through sneaker: pseudomonas
Sandifer syndrome: GE Reflux with back arching, stiffness, torticollis often mistaken for neurologic syndrome
Double bubble sign: duodenal atresia
String sign: pyloric stenosis
Current jelly stool: intussusception
Meissner’s and Auerbach’s plexus
Perianal pruritis: pinworms/enterobius vermicularis (treatment: Vermox/mebendazole)
Aspirin in children: Not used because of Reye’s syndrome except in Kawasaki’s Disease
Steeple sign: Narrowed
Thumb sign: swollen epiglottis in epiglottitis (caused by H.flu)
Round pneumonia: pneumococcus
Latent TB therapy: INH
Night blindness: Vitamin A deficiency
Trismus: peritonsillar abscess
Choking, cyanosis, cough with feeding: Tracheo-esophageal fistula
Cystic chest mass: Cystic adenomatoid malformation (CCAM), diaphragmatic hernia
Still’s murmur: innocent murmur (vibratory)
Wolf-Parkinson-White Syndrome: accessory pathway causing SVT (delta wave)
Sail sign: thymus
Boot shaped heart: Tetrology of Fallot (tet spells)
Snowman on CXR: Total Anomalous Pulmonary Venous Return (TAPVR)
Egg on a string/big blue baby: Transposition of great arteries (no murmur/cyanosis/duct dependent/needs prostaglandins)
Aschoff bodies: seen in the atrial myocardium with rheumatic fever
Erythema marginatum/Syndenham’s chorea: rheumatic fever
Strawberry tongue: Kawasaki’s Disease
Pulseless disease: Takayasu’s arteritis
Herald patch/Christmas tree distribution: pityriasis rosea

Salmon pink plaque with silvery scale: psoriasis

Allergic salute: seen in rhinitis often associated with asthma, eczema creating the allergic triad

Rhus dermatitis: poison oak/ivy

Honey crust: impetigo – treat with oral anti staph antibiotic (keflex, augmentin)

Sandpaper rash: scarlet fever

Central clearing: tinea corporis, erthema chronicum migrans

“spaghetti and meatball” on KOH: tinea versicolor

pearly umbilicated papules: molluscum

herpetic whitlow: HSV on finger or thumb

satellite lesions: candida

thread like burrows/ in webspaces: scabies

tics/uncontrolled blinking: Tourette’s

next step if no IV access in emergency: intraosseous access

initial fluid bolus: 20cc/kg normal saline

SVT treatment: vagal manoevers, adenosine, synced cardioversion

Port wine stain: associated with Sturge Weber, needs brain MRI

Cushing’s triad: increased ICP causing increased blood pressure, decreased heart rate, and decreased respiratory rate

Kernig and brudzinski signs: positive in meningitis

Honey: infant botulism

Lucid interval (convex lens shaped): epidural hematoma

Concave, crescent shaped lesion that does not cross midline in Head CT: subdural hematoma

Infantile spasms: refractory seizures often seen in tuberous sclerosis

Dacryostenosis: blocked tear duct frequently seen in newborns

decreased mobility of TM: seen in otitis media or otitis media with effusion

poly articular septic arthritis: gonorrhea

painless limp: Legg Calve Perthes

obese: SCFE, hypertension, sleep apnea, diabetes, acanthosis nigricans

Reiter’s syndrome: arthritis, urethritis, and uveitis
Review Fracture types: Torus fracture/Salter harris fracture/Greenstick fracture/Toddler fracture
Nursemaid’s elbow: subluxation of a radial head/ reduce with supination/abduction.
Ortalani/Barlow: manoeuvres to detect developmental hip dysplasia
Blue sclera: osteogenesis imperfecta
Klippel-feil syndrome: cervical fusion
Gower’s maneuver: muscular dystrophy
Inability to walk up stairs/ heliotrope rash: dermatomyositis
Edema and proteinuria: nephrotic syndrome (usually minimal change disease 85%)
Hemoptysis, sinusitis, and glomerulonephritis : Wegener’s granulomatosis
Hemoptysis, dyspnea, and renal failure: Goodpasture’s syndrome
cremasteric reflex: absent in testicular torsion
physiologic anemia of infancy: 8 to 12 weeks
goat milk: folate deficiency/megaloblastic anemia
PICA/ basophilic stippling: lead intoxication
sepsis in sickle cell: pneumococcus
child treated with sulfa drug: G6PD deficiency or Stevens Johnson Syndrome/Erythema Muliforme
pallor and FH of gallstone disease: hereditary spherocytosis
IVIG: treatment for Kawasaki’s and ITP
Nonblanching lesion: petechiae/purpura
Epistaxis with prolonged bleeding time, normal platelets: vonWillebrand’s disease
Febrile American born African returns from trip: Malaria
Oxygen unresponsive cyanosis: methemoglobinemia/Rx IV Methylene Blue
Reed Sternberg cell: Hodgkin’s Lymphoma
Hyperkalemia/hyponatremia in newborn: CAH (Congenital Adrenal Hyperplasia)
Hypoglycemia and micropenis: Pan hypopit
Anosmia: Kallman’s syndrome with amennorrhea