

2026-2027 Pediatrics Review Syllabus

Cardiology

Page 132, Congenital Heart Disease > Heart Failure (HF) in the First Week of Life

> HF—High-Yield Pearls

<i>Text currently reads:</i>	<i>Text should read:</i>
HF—High-Yield Pearls - HF in the 1st week of life? Left heart obstruction (or vein of Galen AV fistula) - HF at 4-6 weeks of life? Left-to-right shunts - HF at 4-6 years of age (or older)? Acquired heart disease (eg, myocarditis, rheumatic fever) - Mnemonic - Days Months - Years	HF—High-Yield Pearls - HF in the 1st week of life? Left heart obstruction (or vein of Galen AV fistula) - HF at 4-6 weeks of life? Left-to-right shunts - HF at 4-6 years of age (or older)? Acquired heart disease (eg, myocarditis, rheumatic fever) - Mnemonic - Days Weeks - Years

Page 140, Acquired Heart Disease > Dilated Cardiomyopathy > Etiology of Dilated Cardiomyopathy

<i>Text currently reads:</i>	<i>Text should read:</i>
Etiology of Dilated Cardiomyopathy - Idiopathic - Sequela of viral myocarditis - Endocardial fibroelastosis - Familial (X-linked, autosomal dominant, autosomal recessive) - Mutations of proteins linking sarcolemma and extracellular matrix to contractile proteins (eg, dystrophin in muscular dystrophy) - Mutations of the mitochondrial protein tafazzin in Barth syndrome - Mutations of contractile proteins (eg, actin, troponins) - Metabolic - Glycogen storage diseases (eg, Pompe disease) - Carnitine deficiency - Hypothyroidism - Mitochondrial diseases - Nutritional - Beriberi (thiamine) - Starvation - Drugs - Anthracyclines - Ipecac Chloramphenicol	Etiology of Dilated Cardiomyopathy - Idiopathic - Sequela of viral myocarditis - Endocardial fibroelastosis - Familial (X-linked, autosomal dominant, autosomal recessive) - Mutations of proteins linking sarcolemma and extracellular matrix to contractile proteins (eg, dystrophin in muscular dystrophy) - Mutations of the mitochondrial protein tafazzin in Barth syndrome - Mutations of contractile proteins (eg, actin, troponins) - Metabolic - Glycogen storage diseases (eg, Pompe disease) - Carnitine deficiency - Hypothyroidism - Mitochondrial diseases - Nutritional - Beriberi (thiamine) - Starvation - Drugs - Anthracyclines - Ipecac

Metabolic Disorders

Page 384, Energy Utilization Defects > Glycogen Storage Diseases (GSDs) > GSDs—GSD Type 1 (von Gierke Disease)

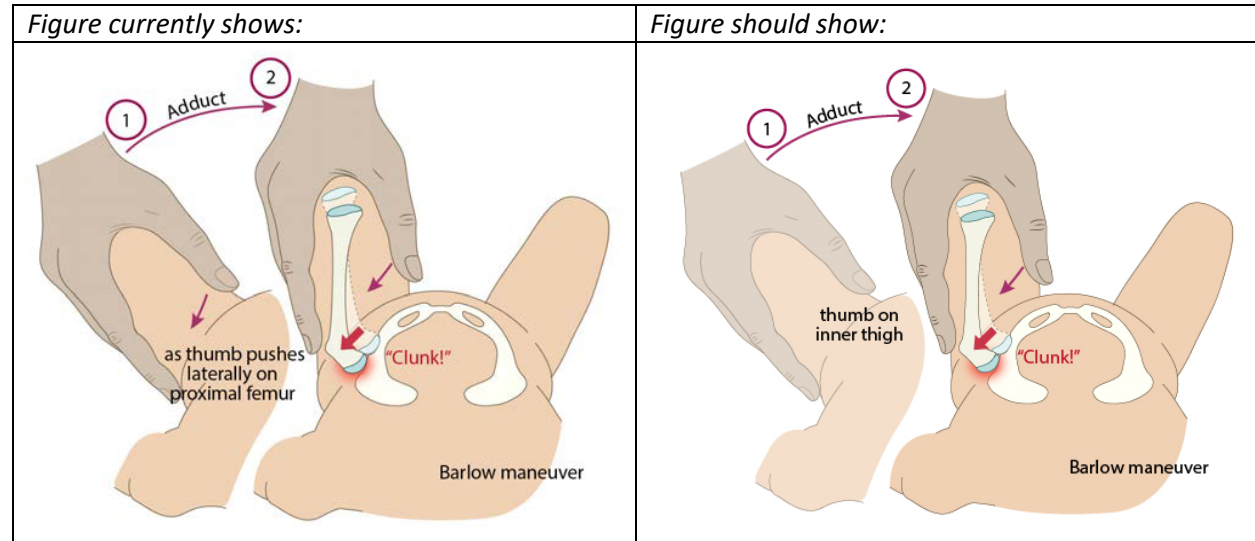
<i>Text currently reads:</i>	<i>Text should read:</i>
• Key lab findings – Hypoglycemia • Does not make glucose from stored glycogen – Lactic acidosis • Relies on anaerobic metabolism – Hyperuricemia • Breaks down protein for glucose – Hyperlipidemia • Breaks down fat for energy – Elevated liver enzymes • Storing glycogen in the cells – 1b → neutropenia – Lots of ketones—using fat and protein for energy!!!	• Key lab findings – Hypoglycemia • Does not make glucose from stored glycogen – Lactic acidosis • Relies on anaerobic metabolism – Hyperuricemia • Breaks down protein for glucose – Hyperlipidemia • Breaks down fat for energy – Elevated liver enzymes • Storing glycogen in the cells – 1b → neutropenia

Page 385, Energy Utilization Defects > Hypoglycemia > Table

Table currently reads:			Table should read:		
Finding	Present	Disorder	Finding	Present	Disorder
Hepatomegaly	Yes	GSD, galactosemia, HFI	Hepatomegaly	Yes	GSD, galactosemia, HFI
	No	Hyperinsulinism, pituitary dysfunction, organic acidemias		No	Hyperinsulinism, pituitary dysfunction, organic acidemias
Reducing substances	Yes	Galactosemia, HFI	Reducing substances	Yes	Galactosemia, HFI
	No	GSD, FAODs		No	GSD, FAODs
Urinary ketones	Yes	Galactosemia, pituitary dysfunction, HFI, GSD	Urinary ketones	Yes	Galactosemia, pituitary dysfunction, HFI
	No	FAODs		No	FAODs, GSD
Response to glucagon	Yes	Hyperinsulinism	Response to glucagon	Yes	Hyperinsulinism
	No	GSD, HFI		No	GSD, HFI

Musculoskeletal & Sports Medicine

Page 401, Disorders of the Lower Extremity > Developmental Dysplasia of the Hip (DDH) > DDH—Screening Maneuvers

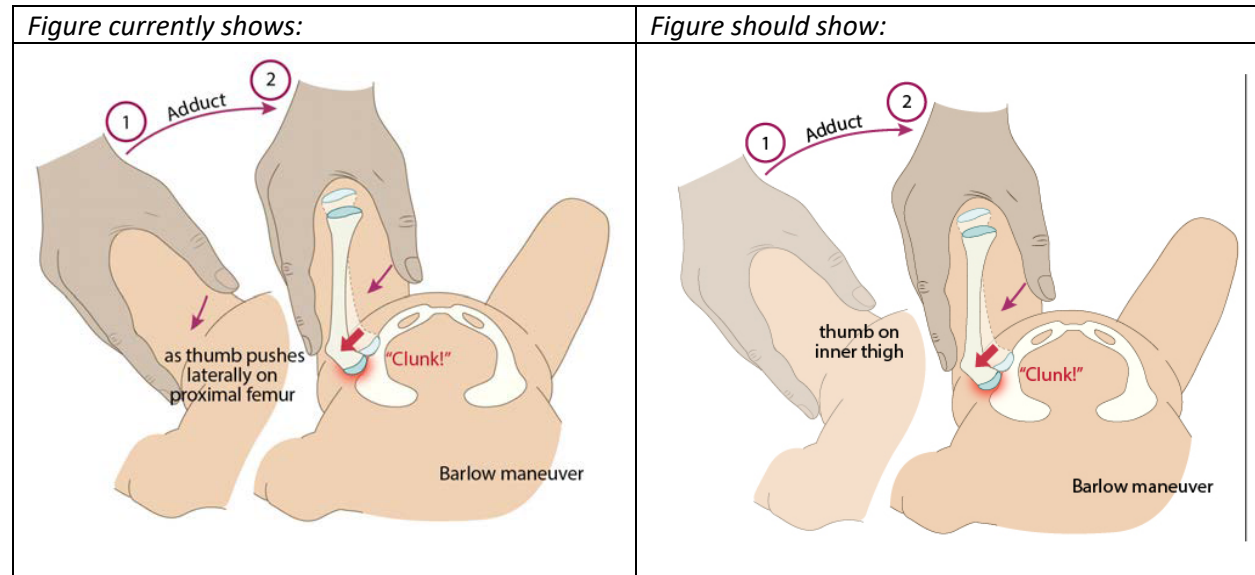


Neonatology

Page 430, Physiologic Transitioning at Birth > Physiologic Transitioning at Birth—Shunts

Text currently reads:	Text should read:
Physiologic Transitioning at Birth—Shunts - There are 2 right-to-left shunts in the fetal circulation Foramen ovale (FO)—shunts blood from left atrium to right atrium Ductus arteriosus (DA)—shunts blood from pulmonary artery to aorta - Result from the low vascular resistance of the placenta and the high vascular resistance of the fetal lungs, which are filled with fluid	Physiologic Transitioning at Birth—Shunts - There are 2 right-to-left shunts in the fetal circulation Foramen ovale (FO)—shunts blood from right atrium to left atrium Ductus arteriosus (DA)—shunts blood from pulmonary artery to aorta - Result from the low vascular resistance of the placenta and the high vascular resistance of the fetal lungs, which are filled with fluid

Page 453, Newborn Conditions > Skeletal Abnormalities > Developmental Dysplasia of the Hip



Bonus Video: Biostatistics

Page 643, Study Designs > Odds

Table currently reads:			Table should read:		
Odds			Odds		
Coin Flips	Probability of Heads	Odds of Heads	Coin Flips	Probability of Heads	Odds of Heads
1	1/2	1:1	1	1/2	1:1
2	1/4	1:3	2	1/4	1:3
3	1/8	1:7	3	1/8	1:7
4	1/16	1:15	4	1/16	1:15
5	1/2	1:31	5	1/32	1:31
Coin Flips	Probability of Not Heads	Odds of Not Heads	Coin Flips	Probability of Not Heads	Odds of Not Heads
1	1/2	1:1	1	1/2	1:1
2	3/4	3:1	2	3/4	3:1
3	7/8	7:1	3	7/8	7:1
4	15/16	15:1	4	15/16	15:1
5	31/32	31:1	5	31/32	31:1

Page 644, Study Designs > Odds Ratio (OR)

Text currently reads:	Text should read:
Odds Ratio (OR) - Measures how likely an exposure is to lead to a specific event Ratio of 2 sets of odds: odds of event occurring in an exposed group vs odds of event occurring in unexposed group - Odds in exposed group = (dog owners with asthma)/(dog owners without asthma) - Odds in unexposed group = (nondog owners with asthma)/(nondog owners without asthma) OR = odds in exposed group/odds in unexposed group - OR = 1 means no difference in odds - OR > 1 means odds greater for exposed group (cases) - OR < 1 means odds greater for unexposed group (controls)	Odds Ratio (OR) - Measures how likely an exposure is to lead to a specific event Ratio of 2 sets of odds: odds of event occurring in an exposed group vs odds of event occurring in unexposed group - Odds in exposed group = (dog owners with asthma)/(dog owners without asthma) - Odds in unexposed group = (nondog owners with asthma)/(nondog owners without asthma) OR = odds in exposed group/odds in unexposed group - OR = 1 means no difference in odds - OR > 1 means odds greater for exposed group - OR < 1 means odds greater for unexposed group

Page 646, Hypothesis Testing

Text currently reads:	Text should read:
- The alternative hypothesis does not always need to assess superiority - The study's alternative hypothesis (H_A) - New Drug is equal to or better than Gold Standard at treating allergic rhinitis Null hypothesis (H_0) - New Drug is inferior to Gold Standard at treating allergic rhinitis - These are called noninferiority trials	- The alternative hypothesis does not always need to assess superiority - The study's alternative hypothesis (H_A) - New Drug is not worse than Gold Standard at treating allergic rhinitis Null hypothesis (H_0) - New Drug is worse than Gold Standard at treating allergic rhinitis - These are called noninferiority trials

Page 646, Hypothesis Testing > Confidence Interval (CI)

Text currently reads:	Text should read:
Confidence Interval (CI) - Close cousin to P value - Range of values expected to contain the value of the parameter for a population, with a specified level of confidence - Usually applied to the difference in outcomes between treatment and intervention group - More patients in the study usually results in tighter CIs and lower P values	Confidence Interval (CI) - Close cousin to P value - Range of values expected to contain the value of the parameter for a population, with a specified level of confidence - Usually applied to the difference in outcomes between treatment (intervention) and control group - More patients in the study usually results in tighter CIs and lower P values

Page 650, Likelihood Ratio (LR) > AR 8

Text currently reads:	Text should read:
AR 8 A 67-year-old patient comes to the emergency department for cough and shortness of breath for the past 3 days. Past medical history is notable for prior MI and class II HF. VS: T 37.3 °C (99.2 °F), BP 116/78 mm Hg, P 92, RR 26, SpO₂ 88% on room air Chest: Crackles and scattered wheezes bilaterally WBC 12.1, BNP 260 Procalcitonin blood test is positive. Procalcitonin has a positive LR of 8.2 and a negative LR of 0.7 for bacterial infections. Which statement best describes the diagnostic value of procalcitonin? A. Good for ruling in disease, poor for ruling it out B. Good for ruling out disease, poor for ruling it in C. Good for both ruling disease in and out D. Poor for both ruling disease in and out Answer: _____	AR 8 A 67-year-old patient comes to the emergency department for cough and shortness of breath for the past 3 days. Past medical history is notable for prior MI and class II HF. VS: T 37.3 °C (99.2 °F), BP 116/78 mm Hg, P 92, RR 26, SpO₂ 88% on room air Chest: Crackles and scattered wheezes bilaterally WBC 12.1, BNP 260 Procalcitonin blood test is positive. Procalcitonin has a positive LR of 8.2 and a negative LR of ≤ 0.1 for bacterial infections. Which statement best describes the diagnostic value of procalcitonin? A. Good for ruling in disease, poor for ruling it out B. Good for ruling out disease, poor for ruling it in C. Good for both ruling disease in and out D. Poor for both ruling disease in and out Answer: _____