

DMS-2983: SUPPLEMENTAL SPECIALITY REGISTRY REVIEW

Cuyahoga Community College

Viewing: DMS-2983 : Supplemental Speciality Registry Review

Board of Trustees:

March 2020

Academic Term:

Fall 2020

Subject Code

DMS - Diagnostic Medical Sonography

Course Number:

2983

Title:

Supplemental Speciality Registry Review

Catalog Description:

Global review of anatomy, physiology, and pathology in relation to the specific sonographic specialty. Test taking skills, image identification, and procedural scenarios covered. Special focus on the specialty exam content outline topics to assist student preparing to take supplemental national credentialing examinations for sonography.

Credit Hour(s):

1

Lecture Hour(s):

1

Requisites

Prerequisite and Corequisite

DMS-2301 Intermediate Sonographic Scanning.

Outcomes

Course Outcome(s):

Apply knowledge of normal and abnormal anatomy and associated physiology and pathology to discuss the importance of the sonogram as it relates to the patient's exam.

Objective(s):

1. Recognize and identify the sonographic appearance of normal and abnormal anatomic structures and their Doppler patterns in the sonographic specialty.
2. Recognize signs and symptoms that indicate the necessity for a sonogram in the specialty.
3. Describe indications for the specific specialty sonographic exam.
4. Describe hemodynamic changes seen when pathophysiological abnormalities are present.

Course Outcome(s):

Describe protocol to perform a thorough diagnostic sonogram in the specialty using the necessary system capabilities and applications.

Objective(s):

1. Demonstrate an understanding of embryologic formation and congenital abnormalities versus acquired pathology.
2. Demonstrate the ability to correlate technical findings with the necessary protocol.
3. Recognize emergency situations and procedures and describe proper response.
4. Describe and discuss topics relating to image evaluation, display and preservation.
5. Define various testing methods used to interrogate normal and abnormal anatomy.
6. Discuss current related diagnostic procedures used in conjunction with sonography.

7. Describe the importance and impact that laboratory values, pharmacology and other testing modalities have with a sonographic exam.
 8. Describe measurements, calculations and Doppler necessary to evaluate anatomic variants.
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Methods of Evaluation:

1. Quizzes
2. Participation in group discussion
3. Homework assignments
4. Final exam

Course Content Outline:

1. Concepts
 - a. Protocols
 - b. Preparation
 - c. Cross-sectional anatomy
 - d. Pathophysiology
 - e. Scope of Practice
 - f. Critical thinking
 - g. Hemodynamics
 - h. Disease Process and affects
 - i. Disease Appearance
2. Skills
 - a. Applying test taking skills to the mock exams and to the credentialing exam.
 - b. Analyzing and reporting findings.
 - c. Identifying anatomy
 - d. Recognizing pathology
 - e. Determining normal versus abnormal anatomy and blood flow
3. Issues
 - a. Knowledge retention
 - b. Standards of practice
 - c. Exam Preparation
 - d. Communication with diverse populations
 - e. Critical thinking
 - f. Medical ethics
 - g. Difficult examinations

Course Outline

1. Test taking skills
 - a. Frame of mind
 - b. Environment
 - c. Preparation
 - d. Strategies
2. Review of normal sonographic anatomy
 - a. Variants
 - b. Pertinent physiology
 - c. Sonographic impressions
3. Review of abnormal sonographic anatomy
 - a. Etiologies
 - b. Affects on the patient
 - c. Appearance
 - d. Measurements or calculations
 - e. Therapeutic interventions
 - f. Congenital anomalies
 - g. Pathophysiology
 - h. Hemodynamics
 - i. Sonographic impressions
4. Review of patient evaluation

- a. Preparation
 - b. Signs and Symptoms
 - c. Risk Factors
 - d. Laboratory Results
 - e. Emergency conditions and procedures
5. Review of laboratory values, pharmaceuticals, and diagnostic tests that have a relationship to the patient's exam.
 6. Review of Doppler attributes specific to the exam
 - a. Physical principles
 - b. Instrumentation
 - c. Principles of Doppler and color flow
 7. Current standards

Resources

Guthrie, Joy. *National Certification Examination Review: Fetal Cardiac Sonography*. Dallas, TX: Society of Diagnostic Medical Sonography, 2009.

Harland, Brooke K. *National Certification Examination Review: Pediatric Cardiac Sonography*. Dallas, TX: Society of Diagnostic Medical Sonography, 2009.

Gill, Kathryn A., Jim Baun, Traci B.Fox. *Ob/Gyn Sonography Review*. 2nd ed. Pasadena, CA: Davies Publishing Inc, 2017.

Stahl, Nikki, Valrie Kunes, and Bradley Robinson. *Fetal Echo Review: A Q&A Review for the ARDMS Specialty Exam*. 2nd ed. Pasadena, CA: Davies Publishing Inc, 2017.

Burns, Joie, Ann Willis and Julia M. Ladisa-Michalek. *National Certification Examination Review: Abdominal Sonography including Superficial Structures and MSK*. Dallas, TX: Society of Diagnostic Medical Sonography, 2009.

Reuter, Karen L. *Obstetric & Gynecology Ultrasound: Case Review Series*. 3rd ed. St. Louis: LWW, 2013.

Penny, Stephen. *Examination Review for Ultrasound: Abdomen and Obstetrics & Gynecology*. 2nd ed. Philadelphia: Lippincott Williams, 2017.

Odwin, Charles & Fleischer, Arthur. *Lange Review Ultrasonography Examination with CD-ROM*. 4th ed. Columbus, Oh: McGraw-Hill, 2012.

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