

Sports Ultrasonography Education Is Advised For Fellowships In Sports Medicine By The American Medical Society For Sports Medicine

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1. Abstract

The curriculum created in 2010 by the American Medical Society for Sports Medicine (AMSSM) has been revised and is now available as SPORTS US. The curriculum has undergone a number of revisions, the main one being the creation of a route that allows a sports medicine fellow to complete enough SPORTS US training to master the program's basic skills. The learning objectives part of this document contains an explanation of SPORTS US's essential skills. The panel recognised that non-MSK ultrasound applications, such as the FAST evaluation (focused assessment with sonography for trauma), are included in the developing field of SPORTS US, which is why the word was intentionally chosen instead of "musculoskeletal ultrasound" (MSK US).

2. Introduction

The SPORTS US basic competencies in this curriculum indicate the bare minimum of SPORTS US knowledge that a sports medicine fellow should learn during fellowship, despite the fact that they are all MSK in nature. However, the fellowship director may choose to offer further instruction in more sophisticated MSK and non-MSK ultrasound applications. The American Institute of Ultrasound in Medicine (AIUM) requires completion of this SPORTS US programme in order to perform an MSK US examination. It also satisfies the requirements for the MSK sonography certification examination of the American Registry for

Diagnostic Medical Sonography (ARDMS). The panel recognised that non-MSK ultrasound applications, such as the FAST evaluation (focused assessment with sonography for trauma), are included in the developing field of SPORTS US, which is why the word was intentionally chosen instead of "musculoskeletal ultrasound" (MSK US). The SPORTS US basic competencies in this curriculum indicate the bare minimum of SPORTS US knowledge that a sports medicine fellow should learn during fellowship, despite the fact that they are all MSK in nature. However, the fellowship director may choose to offer further instruction in more sophisticated MSK and non-MSK ultrasound applications. The American Institute of Ultrasound in Medicine (AIUM) requires completion of this SPORTS US programme in order to perform an MSK US examination. It also satisfies the requirements for the MSK sonography certification examination offered by the American Registry for Diagnostic Medical Sonography.

3. Sessions of Didactic Instruction:

During the fellowship, didactic training can take the form of planned teaching sessions or a dedicated SPORTS US course (see the section Didactic Instructional Sessions). The physics of ultrasound, image acquisition and optimisation, normal and pathological tissue appearance, ultrasound artefacts, benefits and drawbacks of SPORTS US in comparison to other imaging modalities, and diagnostic and interventional procedures relevant to the major body regions seen in a sports medicine practice should all be covered in didactics.

4. Practice Sessions for Didactic:

Practice sessions that involve didactic hands-on learning should be finished directly under the guidance of a trained mentor. A person who satisfies the requirements listed in the AIUM Training Guidelines for Physicians and Chiropractors Who Evaluate and Interpret Diagnostic Musculoskeletal Ultrasound Examinations is considered a qualified mentor. Fellows should use the skills and knowledge they learned in the didactic instruction sessions in a monitored and controlled setting during these sessions (see to the section Didactic Practice Sessions).

5. Clinical Experience Under Guidance:

The fellow should work directly with a certified mentor to perform diagnostic scans and interventional procedures on patients in a clinical setting as knowledge and skills are gained. The degree of supervision may be changed as the fellow becomes skilled in the clinical application of

diagnostic and interventional SPORTS US procedures, as permitted by institutional policy guiding teaching guidelines.

6. Continuing and Supplementary Education:

In order to strengthen the knowledge and skills acquired during the didactic sessions and the mentored clinical practice, the fellow's education should incorporate additional educational activities.

Independent scanning practice sessions are necessary:

It is advised to:

- a. read journal articles and reference texts;
- b. present articles about SPORTS US at journal club;
- c. use educational DVDs and internet resources; and
- d. go to SPORTS US conferences and presentations.

The way suggested extracurricular learning opportunities are incorporated into fellowships could differ depending on the resources that are available and the general curriculum design. After completing a fellowship, the natural step-by-step growth of diagnostic and interventional SPORTS US education will guarantee that the trainees have acquired enough SPORTS US abilities to practise the core competencies of diagnostic and interventional SPORTS US independently.

SPORTS US TRAINING LEARNING OBJECTIVES DURING FELLOWSHIP:

Determine and go over how the basic controls on an ultrasound machine console work, such as

- a. transducer selection and
- b. presets.
- c. depth;
- d. focus zone/region; e. gain; f. adjustment for time gain/depth gain;
- g. Zoom (which includes write and read zoom)

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