

# Instructions for Authors

A complete set of *AJR* Instructions for Authors, including information about figure processing and electronic submission requirements, can be found at [www.arrs.org](http://www.arrs.org).

***AJR Integrative Imaging* submissions should follow the formats outlined below.**

## I. Reviews and Self-Assessment Modules

Although these articles may have a variety of formats (see specific types below), common elements include educational objectives, multiple-choice self-assessment questions that refer directly to the educational objectives, explanation of the correct and incorrect responses, and references. It is expected that some multiple-choice questions may be case-based. Each illustration should have a detailed description, either in the legend or in the text, and include the age, sex, and condition of the patient, as well as a description of the technology used to produce the image (e.g., endoluminal 3D CTC image of 32-year-old man with...).

**Author instructions:** The review portion of the manuscript should have 5,000–10,000 words of text, 10–25 figure parts, and as many references as needed. The self-assessment portion should have a least 10 four-option multiple-choice questions with complete solutions. The multiple-choice questions should have a single best response, and should be acceptable to the American Board of Radiology (ABR). The multiple-choice questions may be used to introduce the case discussions, to assess comprehension, or both. The solution to each multiple-choice question should explicitly state why each of the answer options is or is not the best response, and should have at least one reference. Redundancy of information presented in the solutions with that presented in the article text is to be expected.

**Type 1. Case-based:** This format consists of a set of educational case scenarios related by a theme. The case presentations consist of the clinical presentation, the rationale for imaging, a description of the images, and commentary. If appropriate, there may be separate sections for the differential diagnosis, the final diagnosis, and a conclusion, if these items are not worked into the commentary. The theme that relates the cases may be any combination of anatomy, clinical presentation, pathophysiology, technique, demographics, etc. These articles should have a minimum of six case scenarios. The accompanying self-assessment module (SAM) should have at least 10 multiple choice questions with solutions. The solutions should explain each answer option and include a reference; the reference may be to the accompanying case-based review. The following is an example of a case-based review and SAM:

- Thapa M, Pruthi S, Chew FS. Radiographic assessment of pediatric foot alignment: review. *AJR* 2010; 194[suppl]: S51–S58
- Thapa M, Pruthi S, Chew FS. Radiographic assessment of pediatric foot alignment: self-assessment module. *AJR* 2010; 194[suppl]: S59–S63

**Type 2. Evidence-based:** This format consists of discussions of one or more clinical management issues. The scientific evidence for different courses of management is presented in the

context of illustrative case scenarios. These articles should have a minimum of six case scenarios. The following is an example of an evidence-based review and accompanying self-assessment module (Editor's note: Fewer multiple choice questions were required at the time this SAM was qualified by the ABR):

- Attili AK, Cascade PN. CT and MRI of Coronary Artery Disease: Evidence-Based Review. *AJR* 2006; 187[suppl]: S483–S499
- Attili AK, Foral JM, Schoepf J, Cascade PN, Chew FS. CT and MRI of Coronary Artery Disease: Self-Assessment Module. *AJR* 2006; 187[suppl]: S500–S504

**Type 3. Pictorial review (clinically or pathophysiology-based):** This format consists of an exposition on a clinically or pathophysiology-based topic with extensive illustrations. The following is an example of a pictorial review and self-assessment module (Editor's note: Fewer multiple-choice questions were required at the time this SAM was qualified by the ABR):

- Poon CS, Chang J-K, Swarnkar A, Johnson MH, Wasenko J. Radiologic Diagnosis of Cerebral Venous Thrombosis: Pictorial Review. *AJR* 2007; 189[suppl]: S64–S75
- Poon CS, Chew FS. Radiologic Diagnosis of Cerebral Venous Thrombosis: Self-Assessment Module. *AJR* 2007; 189[suppl]: S76–S78

**Type 4. Review article:** This format consists of a traditional review article with a large number of references. Illustrative cases and multiple-choice questions may be used to introduce or review topics. The following is an example of a review article and self-assessment module (Editor's note: Fewer multiple-choice questions were required at the time this SAM was qualified by the ABR):

- Momeni AK, Roberts CC, Chew FS. Imaging of Chronic and Exotic Sinonasal Disease: Review. *AJR* 2007; 189[suppl]: S35–S45
- Momeni AK, Roberts CC, Chew FS. Imaging of Chronic and Exotic Sinonasal Disease: Self-Assessment Module. *AJR* 2007; 189[suppl]: S46–S48

**Type 5. Self-assessment module without accompanying review:** This format consists of educational objectives, a list of required educational activities that are external to the SAM itself (such as published articles or Web content), 10 or more multiple-choice questions that refer to the educational objectives and activities, and complete solutions that explain each answer option and provide references.

The following is an example of a self-assessment module without accompanying review (Editor's note: Fewer multiple-choice questions were required at the time this SAM was qualified by the ABR):

- Ko JP, Roberts CC, Berger WG, Chew FS. Imaging Evaluation of the Solitary Pulmonary Nodule: Self-Assessment Module. *AJR* 2007; 188[suppl]: S1–S4

## 2. Radiological Reasoning

These are case presentations that step the reader through an expert's analysis of a difficult case. The case is presented progressively, with the expert's thought process described in detail. Concluding comments tie up loose ends and provide references and additional relevant factual material. Clinical reasoning presentations should fit on approximately five journal pages. The title of the article should reflect the clinical or imaging presentation, not the specific pathologic diagnosis. The abstract should include the diagnosis and the take-home message of the article.

*Author instructions:* 2,000–4,000 words, NOT including the multiple choice questions and solutions, 5–10 figure parts. Three voices: case presenter, expert discussant, and expert commentator. Do not include a review of the literature because these may be found elsewhere (e.g., textbooks and actual review articles). Each article should be followed by five four-option multiple-choice questions that will be used to assess comprehension. Each of the best and non-best responses should be explicitly explained in the solutions, and each solution should have at least one reference.

Radiological reasoning articles are often used as required reading for self-assessment modules (see SAM Type 5, above), therefore, authors of radiological reasoning manuscripts are strongly encouraged to submit a companion self-assessment module manuscript at the same time. The following is an example of a radiological reasoning article and accompanying self-assessment module (Editor's note: Fewer multiple choice questions were required at the time this SAM was qualified by the ABR):

- Liu PT. Radiological Reasoning: Acutely Painful Swollen Finger. *AJR* 2007; 188:[suppl]:S13–S17
- Roberts CC, Liu PT, Chew FS. Imaging Evaluation of Tendon Sheath Disease: Self-Assessment Module. *AJR* 2007; 188:S10–S12

## 3. Teaching File

Teaching file cases are standard cases that are well illustrated, typically with an interesting twist. Unlike case reports, which seek to extend the frontiers of knowledge, teaching file cases are intended as exemplars of known appearances and presentations of disease, with the goal of educating the reader. The standard presentation includes clinical history, clinical images, radiologic description, focused differential diagnosis, final diagnosis, and commentary. An abstract should be prepared that provides an educational objective and a conclusion. The title of the article should reflect the clinical or imaging presentation rather than the specific pathologic diagnosis. Authors should provide two four-option multiple-choice questions with complete solutions. Each of the best and non-best responses should be explicitly explained in the solutions, and each solution should have at least one reference. Authors will need to provide indexing terms and coding.

Teaching file cases should be 1,000–2,000 words, NOT including the multiple-choice questions and solutions, and typically no more than eight figure parts. Some teaching file manuscripts may be selected for publication as Web exclusives. Teaching File cases are often used as required reading for self-assessment modules (see SAM Type 5, above), therefore, teaching file manuscripts that are amenable to such use or are accompanied by a companion self-assessment module manuscript are much more likely to receive serious consideration. The following is an example of a teaching file article and accompanying self-assessment module (Editor's note: Fewer multiple choice questions were required at the time this SAM was qualified by the ABR):

- Sutcliffe JB III, Bui-Mansfield LT. *AJR* Teaching File: Intermittent Claudication of the Lower Extremity in a Young Patient. *AJR* 2007; 189[suppl]:S17–S20
- Chew FS, Bui-Mansfield LT. Imaging Popliteal Artery Disease in Young Adults with Claudication: Self-Assessment Module. *AJR* 2007; 189[suppl]:S13–S16