

AJR Guidelines for Authors

Authors are strongly encouraged to submit manuscripts online at www.arrs.org. Mailed, hard-copy manuscripts will be accepted for a limited time and should be addressed to ARRS Publications Department at the address immediately below. Inquiries regarding advertising or permission to republish *AJR* material also should be addressed to:

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The *AJR* publishes original contributions to the advancement of medical diagnosis and treatment. Submitted manuscripts should not contain previously published material and must not be under consideration for publication elsewhere.

Manuscript decisions are based on peer review. Reviewers receive manuscripts with blind title pages to ensure an unbiased review. Statements made in the article, including changes made by the Editor or manuscript editor, are the responsibility of the author and not of the *AJR* or ARRS. Authors will be sent page proofs via e-mail. If the corresponding author will be unavailable to review page proofs, arrangements should be made for a coauthor or colleague to read and return the proofs.

Articles will be edited to conform to the individual style of the *AJR*.

General Guidelines for Major Papers

Abstract. Clearly state (in 250 or fewer words) the objective, materials (or subjects) and methods, results, and conclusions of the study. Include actual data.

Introduction. Briefly describe the objective of the investigation and explain why it is important.

Methods. Describe the research plan, the materials (or subjects), and the methods used, in that order. Explain in detail how disease was confirmed and how subjectivity in observations was controlled.

Results. Present results in a clear, logical sequence. If tables are used, do not duplicate tabular data in text, but do describe important trends and points.

Discussion. Describe the limitations of the research plan, materials (or subjects), and methods, considering both the objective and the outcome of the study. When results differ from those of previous investigators, explain the discrepancy.

AUTHOR'S CHECKLIST

For all submissions

Complete the following checklist, sign the copyright agreement, and include both with the manuscript.

___ All authors have signed a copyright form.

___ A cover letter has been included, that lists telephone, fax, and e-mail contacts and states the type of article being submitted.

___ If appropriate, *AJR* Guidelines for types of articles other than major papers have been followed.

___ The manuscript, including references, tables, and figure legends, is double-spaced in 12-point typeface. Right-hand margins are not justified.

___ All manuscript pages are numbered consecutively beginning with the abstract. Neither authors' names nor their affiliations appear anywhere on the manuscript pages or on the images.

___ The manuscript for a major paper is organized as follows: blind title page (title only), abstract, introduction, materials (or subjects) and methods, results, discussion, acknowledgments, references, tables, figure legends, and figures.

___ For any study involving human subjects (or animals), state in the Subjects (or Materials) and Methods section of the manuscript that an appropriate institutional review board approved the study.

___ Informed consent has been obtained from patients who participated in clinical investigations. If experiments were performed on animals, authors complied with NIH guidelines for use of laboratory animals.

___ Use of acronyms and abbreviations is discouraged and kept to a minimum. When used, they are defined at first mention, followed by the acronym or abbreviation in parentheses.

___ SI measurements are used throughout, or the SI equivalent is given in parentheses.

___ Names and locations (city and state only) of manufacturers are given for equipment and nongeneric drugs.

Abstract

___ Do not use abbreviations. Do not use reference citations.

___ An abstract of one page (250 words or fewer) is organized into the following paragraphs:

Objective. In one or two sentences, indicate the specific goal or purpose of the article, and indicate why it is worthy of attention. Explain the hypothesis to be tested, the dilemma to be resolved, or the deficiency to be remedied. The objective stated here must be identical to the one given in the title and introduction of the paper.

Materials (or Subjects) and Methods. Describe succinctly the methods used to achieve the objective explained in the first paragraph, stating what was done, how it was done, how bias was controlled, what data were collected, and how the data were analyzed.

Results. The findings of the methods described in the preceding paragraph are presented here. All results should flow logically from the methods described and not stray from the specific objective of the paper. Include as many specific data as possible within the overall length limitation of one typewritten page.

Conclusion. In one or two sentences, present the message to be remembered when all else is forgotten. Describe the conclusion of the study, based solely on the data provided in the body of the abstract. Conclusions must relate directly to the objective of the paper as defined in the title and first paragraph of the abstract.

References

___ References (not to exceed 35) are double-spaced, start on a separate page, and are **numbered consecutively in the order in which they appear in the text.**

___ All references are cited in the text, are enclosed in brackets, and are typed on line with the text (not superscripted).

___ Unpublished data are not cited in the reference list, but are cited parenthetically in the text, for example: (Smith DJ, personal communication), (Smith DJ, unpublished data). This includes papers submitted, but not yet accepted, for publication.

___ Papers presented at a meeting are not cited in the reference list but are cited parenthetically in the text, for example: (Smith DJ et al., presented at the American Roentgen Ray Society meeting, May 1996). After first mention, use (Smith DJ et al., ARRS meeting, May 1996).

___ Inclusive page numbers (e.g., 333–335) are given for all references.

___ Journal names are abbreviated according to *Index Medicus*.

___ Style and punctuation of references follow the format illustrated in the following examples. (All authors are listed when six or fewer; when seven or more authors, the first three are listed, followed by et al.)

Journal article

1. Long RS, Roe EW, Wu EU, et al. Membrane oxygenation: radiographic appearance. *AJR* 1986;146:1257–1260

Book

2. Smith LW, Cohen AR. *Pathology of tumors*, 6th ed. Baltimore: Williams & Wilkins, 1977:100–109

Chapter in a book

3. Breon AJ. Serum monitors of bone metastasis. In: Clark SA, ed. *Bone metastases*. Baltimore: Williams & Wilkins, 1983:165–180

Tables

Each table is printed double-spaced in 12-point typeface on a separate page without vertical or horizontal rules; each table has a short, descriptive title.

Tables do not exceed two pages in length and must contain at least four lines and two columns of data.

Tables are numbered in the order in which they are cited in the text.

Abbreviations are defined in an explanatory note below each table.

Tables are self-explanatory and do not duplicate data given in the text or figures.

All arithmetic (percentages, totals, differences) has been double-checked for accuracy, and tabular data agree with data given in the text.

Figures and Legends

All halftone images must have resolution of 300 DPI and be saved as TIFF files. All line art must have resolution of 1,200 DPI and be saved as TIFF files. Images should be generally consistent in dimension, if possible no larger than 5 inches in height or width. **Other formats (e.g., JPEG, EPS, GIF, PICT, PowerPoint) or lower resolutions will not be usable.** Authors should retain backup files of all images.

Authors must use the following naming convention: (all lowercase) author's last name followed by an underscore and the figure number and part. Example: smith_1a.tif

All figure parts relating to one patient should have the same figure number.

A separate file should be submitted for each figure part.

Electronic manipulation of images that materially alters the medical information must be identified, and alterations are described.

Authors' names and affiliations do not appear anywhere on the images.

Symbols are uniform in size and style and are large enough to withstand reduction.

Line drawings and graphs are in black on a white background, using the same size type as the text. Avoid 0.5-mm hairline rules.

Written permission to reprint in print and electronic media, including online use, has been obtained for use of all previously published illustrations, and an appropriate credit line is given in the legends. A form is available at www.ajronline.org/misc/ifora.shtml for use in requesting permission from copyright owners. Permission letters should be faxed to ARRS with the author's name and manuscript title and/or number included.

Legends use AJR style: **Fig. 1.**—47-year-old woman with rheumatoid arthritis. For each subject, supply age, sex, and condition or diagnosis.

When published, figures become the property of AJR/ARRS.

Title Page

The following information is given: title of article; names and complete addresses including

zip code) of all authors; present addresses of authors who have moved since study; and acknowledgment of grants or other assistance. The corresponding author is clearly identified, and a present address, telephone and fax numbers, and an e-mail contact are given.

A blind title page is included after the title page in each copy of the manuscript, giving only the title (without the authors' names) for use in the review process.

Additional Requirements for Hard Copy Only

Two complete sets of original figures are submitted unmounted in envelopes. Figure numbers correspond to the order in which the figures are cited in the text.

Figures are clean, unscratched, glossy prints, uniform in size and magnification, with white borders. A separate print (not larger than 5 × 7 inches [13 × 18 cm]) is submitted for each figure part.

Each figure has on its back a nonremovable label with the figure number and an arrow indicating "top." Never write directly on images.

Output line art to a 600 DPI or better printer.

Prints will not be returned.

Two copies of the manuscript (the original and a photocopy) and two complete sets of figures are submitted. The author has retained one copy of the manuscript and the figures.

Submit text in a file on a 3 1/2-inch diskette in MS Word or WordPerfect format for Macintosh or Windows.

To the corresponding author: If this submission is accepted for publication, may we include your e-mail address? Yes No

If yes, your e-mail address to be published on the title page of your article is _____ (please print legibly).

Transfer of Copyright Agreement, Conflict of Interest Acknowledgment, Certification of Coauthors, and Exclusive Publication Statement

Complete copyright to the article entitled: _____

(hereinafter, "the article") is hereby transferred to the American Roentgen Ray Society (for United States government employees to the extent transferable), effective if and when the article is accepted for publication in the *American Journal of Roentgenology*.

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- 2) The editor of the *American Journal of Roentgenology* has been or will be informed of any proprietary or commercial interest or conflicts of interest the authors may have that relate directly or indirectly to the subject of this article;
- 3) The scientific content of radiologic images has not been altered, and that disclosure has been made regarding computer enhancement or other electronic manipulation of radiologic images;
- 4) The authors have made substantive and specific intellectual contributions to this article and assume full responsibility for its content;
- 5) This article has not been previously published and is not currently under consideration for publication elsewhere; and
- 6) This agreement has been signed by all of the authors who contributed to the article.

_____	_____	_____	_____
First Author	Second Author	Third Author	Fourth Author
_____	_____	_____	_____
Printed Name/Date	Printed Name/Date	Printed Name/Date	Printed Name/Date
_____	_____	_____	_____
Fifth Author	Sixth Author	Seventh Author	Eighth Author
_____	_____	_____	_____
Printed Name/Date	Printed Name/Date	Printed Name/Date	Printed Name/Date

This agreement must be signed by ALL authors in order for the manuscript to be published.

Types of Articles

The *AJR* publishes specific types of articles. Each type serves a distinct and separate purpose and is judged by different criteria. Manuscripts should be constructed according to specific guidelines for that type of article.

Major Paper

This is the most important type of article because it provides new information based on original research. If the information is accurate and important and the conclusions are substantiated by the data provided, the paper serves to advance radiology. Statistical analysis to support conclusions is usually necessary. **Format.** As described in "General Guidelines for Major Papers" found in the *AJR* Guidelines for Authors.

Perspective

Description of authors' experience with a specific subject. The text describes "how and/or why we do it." There is little or no original information and limited analysis of the literature. Compared with a pictorial essay, text is longer and the figures, fewer. Such articles are usually invited by the editor. **Format.** No abstract. Introduction defines the scope of the paper. Headings are used to separate and organize text.

Review

Scholarly analysis of recent developments on a specific topic as reported in the literature. No new information is described, and no opinions or personal experiences are expressed. Reviews are not encyclopedic like a chapter in a textbook; rather, they include only the highlights. Such articles are usually invited by the editor. **Format.** No abstract. Introduction defines the scope of the paper. Headings are used to separate and organize text.

Pictorial Essay

This is a teaching exercise with the message in the figures and their legends. Text is limited to four pages, and there may be as many as 30 figure parts, but no new information is included. The value of the paper turns on the quality of the illustrations as well as the timeliness and utility of the message. **Format.** No abstract. Introduction defines scope of paper and explains its importance in no more than half of a double-spaced page. Headings are used to separate and organize text.

Case Report

Brief discussion of a single case with unique features not previously described. A case report is more than a pretty image or great case. It must be unique, either by imaging a unique manifestation of a disease or disorder or by making unique use of imaging to reveal a disease or disorder. A second case may augment either the discussion or the illustration of findings, but a single case must remain the focus. **Format.** No abstract. Introduction is a short paragraph giving general background and specific interest of the case. Emphasis should be on the radiologic aspects; clinical information must be limited to that which provides a background for the radiology. The discussion is succinct and focuses on the specific message and relevance of radiologic methods. A review of the literature is not appropriate.

Original Report

Focused description of original, not previously reported, observations concerning unique imaging features of a disease or disorder. An original report is unique because of the imaging, because the interventional procedure has not been used in that particular setting, or because manifestations of the disease or disorder have not been described. Original reports are normally retrospective and not subject to in-depth statistical analysis. **Format.** Begin with an abbreviated abstract (objective and conclusion), which is followed by an introduction. Headings should be "Materials (or Subjects) and Methods," "Results," and "Discussion."

Opinion/Commentary

Short article (five or fewer pages) giving the author's personal judgment on a controversial topic. Illustrations are few. Review of the literature is limited to articles that serve to justify the author's opinion. **Format.** No abstract. Headings are used to separate and organize text.

Computers in Radiology

Description of practical applications of computers in radiology. Such articles are usually short and neither prove the value of the application nor provide original information. When the paper involves a study designed to test a computer application, that paper is usually considered a major paper. **Format.** Begin with an abbreviated abstract (objective and conclusion), which is followed by the introduction that defines the scope of the paper. Headings are used to separate and organize text.

Technical Innovation

Brief description of a specific technique or procedure, modification of a technique, or new equipment of interest to radiologists. **Format.** No abstract. A brief, one-paragraph introduction gives general background. Headings or subheadings are not required. If headings are used, they should be a combination of "Materials (or Subjects) and Methods," "Results," and "Discussion." Discussion is limited to the specific message, including the uses of the technique or equipment. Literature reviews and lengthy descriptions of cases are not appropriate.

Letter to the Editor and Reply

Letters to the editor and replies should offer objective and constructive criticism of published articles. Letters may also discuss matters of general interest to radiologists. Material being submitted or published elsewhere should not be duplicated in letters, and authors must disclose financial associations or other possible conflicts of interest. **Format.** Double-spaced on nonletterhead paper, with no greeting or salutation. The title included on the letter should be short and pertinent. The title for a reply is simply "Reply." Do not use abbreviations in the title, letter, or reply. Authors' names and affiliations appear at the end of letters and replies, which are included in the file sent to the *AJR* on diskette.

Maximums for Articles Submitted to the *AJR*

Type of Article	Pages* of Text (words)	References	Figures (Figure Parts)	Tables
Major Paper	18 (4500)	35	7 (15)	4
Original Report	8 (2000)	12	5 (12)	1
Perspective/Review	15 (3750)	75	10 (24)	4
Pictorial Essay	4 (1000)	8	15 (30)	0
Opinion/Commentary	5 (1250)	5	Figure parts and tables cannot exceed 4	
Computers in Radiology	8 (2000)	5	Figure parts and tables cannot exceed 5	
Case Report	5 (1250)	8	2 (6)	0
Technical Innovation	5 (1250)	8	2 (4)	0
Letter to Editor and Reply	2 (500)	4	2 (4)	0

*Maximum number of pages is exclusive of title page, blind title page, references, and figure legends.

All submissions to the *AJR* must be accompanied by a completed copy of the Author's Checklist and the signed copyright agreement.