DESCRIPTION

The Journal of Hand Surgery publishes original, peer-reviewed articles related to the diagnosis, treatment, and pathophysiology of diseases and conditions of the upper extremity; these include both clinical and basic science studies, along with case reports. Special features include Clinical Perspective articles, Comprehensive Review manuscripts, and Surgical Technique articles that provide an overview of hand surgery, technical aspects of surgery, and current controversial topics.


Benefits to authors

We also provide many author benefits, such as free PDFs, a liberal copyright policy, special discounts on Elsevier publications and much more. Please click here for more information on our author services.

Please see our Guide for Authors for information on article submission. If you require any further information or help, please visit our Support Center.

IMPACT FACTOR

2017: 1.776 © Clarivate Analytics Journal Citation Reports 2018

ABSTRACTING AND INDEXING

Scopus

EDITORIAL BOARD

Editor-in-Chief
Brent Graham, MD, American Society for Surgery of the Hand, Chicago, IL

Deputy Editor-in-Chief
Jennifer Moriatis Wolf, Chicago, Illinois, USA

Deputy Editor, Review
Dawn M. LaPorte, Baltimore, Maryland, USA
**Deputy Editor, Methodology**
Ryan Calfee, St. Louis, Missouri, USA

**Deputy Editor, Social Media**
Ray Raven, Burbank, California, USA

**Associate Editors**
Reid A. Abrams, San Diego, California, USA
Joshua M. Abzug, Timonium, Maryland, USA
Julie E. Adams, Minneapolis, Minnesota, USA
Edward Akelman, Providence, Rhode Island, USA
Mark E. Baratz, Pittsburgh, Pennsylvania, USA
O. Alton Barron, New York, New York, USA
Andrea S. Bauer, Boston, Massachusetts, USA
Pedro K. Beredjiklian, Marlton, New Jersey, USA
Louis W. Catalano III, New York, New York, USA
Alphonsus K. Chong, Singapore
Kevin C. Chung, Ann Arbor, Michigan, USA
Catherine Curtin, Palo Alto, California, USA
Aaron Daluisi, New York, New York, USA
Soumen Das De, Singapore
David G. Dennison, Rochester, Minnesota, USA
Marybeth Ezaki, Dallas, Texas, USA
John Fowler, Pittsburgh, PA
Ali Ghiaasi, Los Angeles, California, USA
Charles A. Goldfarb, St. Louis, Missouri, USA
Christopher Got, Providence, Rhode Island, USA
Ruby Grewal, London, Ontario, Canada
Jerry I. Huang, Seattle, Washington, USA
Matthew Iorio, Denver, CO
Jonathan E. Isaacs, Richmond, Virginia, USA
Peter J.L. Jebson, Grand Rapids, Michigan, USA
Wally Jones, Redmond, Washington, USA
Robin Kamal, Palo Alto, CA
Ryan Katz, Baltimore, Maryland, USA
Stephen A. Kennedy, Seattle, Washington, USA
Graham J.W. King, London, Ontario, Canada
Jason H. Ko, Evanston, Illinois, USA
Lewis B. Lane, Manhasset, New York, USA
Fraser Leveredge, Durham, North Carolina, USA
Scott D. Lifchez, Baltimore, MD
John D. Lubahn, Erie, Pennsylvania, USA
Michael McClinton, Baltimore, Maryland, USA
Gregory Merrell, Indianapolis, Indiana, USA
Scott Mitchell, Los Angeles, California, USA
Amy Moore, St. Louis, Missouri, USA
Peter M. Murray, Jacksonville, Florida, USA
Nash Naam, Effingham, Illinois, USA
Christine Novak, Toronto, Ontario, Canada
Jason A. Nydick, Pensacola, Florida, USA
Kerby C. Oberg, Loma Linda, California, USA
Daniel A. Osei, New York, New York, USA
Kagan Ozer, Ann Arbor, Minnesota, USA
Rita Patterson, Fort Worth, Texas, USA
Craig S. Phillips, Chicago, Illinois, USA
Douglas E. Pittner, Camp Lejeune, North Carolina, USA
Jay F. Pomerance, New York, NY
Lee M. Reichel, Austin, Texas, USA
Craig M. Rodner, Farmington, Connecticut, USA
Tamara D. Rozental, Boston, Massachusetts, USA
Sarah Sibbel, Denver, CO
Roger L. Simpson, Garden City, New York, USA
Gordon M. Singer, Jerusalem, Israel
Scott P. Steinmann, Rochester, Minnesota, USA
John M. Stephenson, Little Rock, Arkansas, USA
Robert J. Strauch, New York, New York, USA
Amir Taghinia, Boston, Massachusetts, USA
INTRODUCTION

Contact details for submission


Aims and scope

The Journal of Hand Surgery publishes original, peer-reviewed articles related to the pathophysiology, diagnosis, and treatment of diseases and conditions of the upper extremity; these include both clinical and basic science studies along with case reports. Special features include Review Articles (including Current Concepts and The Hand Surgery Landscape), reviews of books and media, and Letters to the Editor. Before beginning to write for The Journal of Hand Surgery, prospective authors should read these instructions completely. Authors will also benefit from reading:


The Journal uses anonymous peer review in evaluating manuscripts for publication. Authors must electronically submit new and revised manuscripts in all categories on the Elsevier EVISE system at https://www.evise.com/profile/#/JHS/login. Send other correspondence relating to the editorial management of The Journal of Hand Surgery to the appropriate editor:

Brent Graham, MD, Editor-in-Chief
Dawn M. LaPorte, MD, Review Deputy Editor
The Journal of Hand Surgery
American Society for Surgery of the Hand
822 West Washington Boulevard
Chicago, IL 60607
Phone: (312) 880-1900
Fax: (847) 384-1435
Email: jhs@assh.org

Editorial policies: Statements and opinions expressed in The Journal of Hand Surgery are those of the author(s) and not necessarily those of the Editor or Publisher. The Editor and Publisher disclaim any responsibility or liability for such material. Neither the Editor nor the Publisher guarantees, warrants, or endorses any product or service advertised in this publication; nor do they guarantee any claims made by the manufacturer of such product or service.

Special Features

Case Reports: The Journal receives far more case reports than space allows for publication. To be worthy of publication, a case report must have extraordinary teaching value to the readers. Typically we do not accept cases where 2 findings are associated since the findings are often coincidentally rather than causally related. Restrict the abstract to 150 words and highlight the unique features of the case. In sections identified as Introduction, Case Report, and Discussion and in fewer than 1,500 words, introduce the topic, present the case, and discuss its novelty and educational value. Limit references to 10 citations.

Review Articles

**If you wish to submit a review article to The Journal of Hand Surgery but have not explicitly received an invitation to do so, please complete the Review Article Proposal and email it to the Review Deputy Editor, Dawn M. LaPorte, MD, at jhs@assh.org for consideration. We ask that you do not submit your unsolicited review article to the journal unless the review editor accepts your review topic in writing.**

The review section of the Journal will feature Current Concepts articles on a monthly basis, as well as review articles in a monthly Hand Surgery Landscape section.
Current Concepts is designed to provide review articles that focus on up-to-date information covering essential topics on a three-year rotation. Authors are invited based on their expertise. Unsolicited material is considered after contacting the Review Deputy Editor, Dawn M. LaPorte, MD, at jhs@assh.org with a completed Proposal.

Current Concepts articles are no more than 3,000 words and include a one-paragraph abstract. They must review recent developments and must emphasize the best evidence for management and treatment strategies. In addition to the article, the authors must provide four choice continuing medical education (CME) questions together with a rationale and references for the best answer. Include at least one reference to a "classical article" that has stood the test of time.

While the Current Concepts manuscript should be able to "stand alone" in the print version of the Journal, the digital version will be able to provide hyperlinks to videos and other articles. The authors are encouraged to submit a technical video with their article. Links may also be provided to other articles already published in JHS that may have described techniques or give reference to evidence-based medicine.

Finally, Current Concepts articles should have no more than three authors and generally have no more than 20 references.

The Hand Surgery Landscape articles are designed to generate interest and comment among readers. These articles present content that otherwise might be outside the traditional scope of a typical review topic for The Journal of Hand Surgery. Invitations to contribute articles for this series are made either by the Review Deputy Editor or the Editor-in-Chief. Unsolicited submissions must first be made as a proposal to the Review Editor using the template and sent to Dawn M. LaPorte, MD, at jhs@assh.org. Some, but not all, unsolicited manuscripts may be sent out for peer review. The focus will be on encouraging thought leaders in the areas described below.

This monthly feature has a word count of no more than 2,000 words and includes a one-paragraph abstract. There is no prescribed format other than the maximum word count. References are required for any statements that should be supported by outside sources.

The spectrum of content considered for this series will include:

- Innovative clinical topics
- Education
- Advocacy
- Practice management
- Certification matters

The Surgical Techniques section is an online-only section that provides step-by-step details of various surgical procedures relevant to clinical practice. Articles discuss indications and contraindications, surgical anatomy, surgical technique, postoperative management, pearls and pitfalls, and complications; many articles also provide a case illustration. Surgical Technique articles will be solicited from experts and are open for submission upon receipt of a Proposal. Articles should be no more than 2,500 words, and they should include a one-paragraph abstract. Videos and/or high-resolution photographs are strongly encouraged.

Review of books and media: The Journal publishes reviews of books and other media that will enlarge a reader's perspective even beyond specialty core knowledge and technical skills. Acceptable media include educational material in electronic formats, practice management software programs, and software applications for smart phones. For authors and publishers wishing to have a work reviewed, send 2 copies to Dr. Graham. We will not return material selected for review. We will return material not selected for review only when the sender has prepaid the shipping charges.
We encourage readers to submit unsolicited reviews of books and media that they think would be of interest to other readers. Limit reviews to 800 words and include the work’s title, publisher, city, date of publication, and retail price. Such submissions will go through the same review and selection process as unsolicited scientific manuscripts.

**Letters:** Letters to the editor are encouraged. They may be independent observations, or they may relate to a previously published article. Letters must not duplicate information submitted elsewhere for publication or previously published. Letters are subject to editing and abridgement without the author’s review. Limit the body of the letter to 300 words, authors to 3, references to 5, and tables or figures to 1. We are more likely to publish a letter relating to a previously published article when we receive it promptly after the article is published. We will forward the letter to the author(s) for comment (maximum 300 words and 5 references). The policies regarding conflicts and disclosures for full manuscripts apply to letters as well.

**BEFORE YOU BEGIN**

**Ethics in publishing**
Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.

The *Journal of Hand Surgery* adheres to the ethical standards described by the Committee on Publication Ethics (http://publicationethics.org) and the International Committee of Medical Journal Editors (http://www.icmje.org/urm_main.html). Authors are expected to adhere to these standards.

**Human and animal rights**

**Human subjects:** Articles involving research conducted in human subjects must include a statement in the Materials and Methods section indicating approval by the institutional review board and noting that informed consent, as well as any necessary HIPAA consent, was obtained from each patient. For reports of research using human subjects, provide assurance that (a) necessary and appropriate consent was obtained from each patient and (b) the study protocol conformed to the ethical guidelines of the 1975 Declaration of Helsinki as reflected in a prior approval by the appropriate institutional review committee. Identify patients by number, not by initials. Clinical trials must be registered in a public trials registry. Denote the registry and registry number. Articles emanating from a particular institution must have approval by the requisite authority.

**Animal experimentation:** Manuscripts reporting animal experiments must include a statement in the Materials and Methods section that animal care complied with the guidelines of the authors’ institution and the National Institutes of Health and any national law on the care and use of laboratory animals.

**Standardized reporting guidelines**

The Journal is committed to standardized reporting of clinical trials, meta-analyses, and other studies: *Case reports, cohort studies, and patient series:* Authors should adhere to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines (www.strobe-statement.org) and indicate in the manuscript that they have done so. *Diagnostic measure research:* Authors should adhere to the Standards for Reporting of Diagnostic Accuracy (STARD) guidelines (www.stard-statement.org) and indicate in the Materials and Methods section of the manuscript that they have done so. *Systematic reviews and meta-analyses:* Authors should adhere to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (www.prisma-statement.org) and indicate in the Materials and Methods section of the manuscript that they have done so. A worthy meta-analysis will follow the PRISMA guidelines, be hypothesis driven to address a specific aspect of a topic, include sufficient (ideally at least 10) Level I and II evidence studies that can be supplemented with comparative Level III studies, and not include Level IV studies. The result should clarify the issue addressed. A repeat meta-analysis should follow the original study by at least 5 years, analyze at least 50% more data, and follow the above guidelines. A worthy systematic review will follow the PRISMA guidelines, be hypothesis driven, focus on a specific aspect of a topic, and may include low level evidence. The results should clarify the issue addressed. *Randomized clinical trials:* Authors should adhere to the Consolidated Standards Of Reporting Trials (CONSORT) guidelines (www.consort-statement.org) and indicate in the Materials and Methods section of the manuscript that they have done so.
**Conflict of interest**

Each author is required to submit a Conflict of Interest Statement upon submission of the manuscript. This form requires disclosure from each author indicating that (a) no financial conflict of interest exists with any commercial entity whose products are described, reviewed, evaluated, or compared in the manuscript, except for that disclosed under “Acknowledgments” or (b) a potential conflict of interest exists with one or more commercial entities whose products are described, reviewed, evaluated, or compared in the manuscript. Examples of potential conflicts of interest include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. See also [http://www.elsevier.com/conflictsofinterest](http://www.elsevier.com/conflictsofinterest). Further information and an example of a Conflict of Interest form can be found at: [http://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing](http://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing).

**Submission declaration and verification**

Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service Crossref Similarity Check.

**Use of inclusive language**

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Articles should make no assumptions about the beliefs or commitments of any reader, should contain nothing which might imply that one individual is superior to another on the grounds of race, sex, culture or any other characteristic, and should use inclusive language throughout. Authors should ensure that writing is free from bias, for instance by using 'he or she', 'his/her' instead of 'he' or 'his', and by making use of job titles that are free of stereotyping (e.g. 'chairperson' instead of 'chairman' and 'flight attendant' instead of 'stewardess').

**Changes to authorship**

Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed.

Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

**Copyright**

All material published in the *Journal of Hand Surgery* is vested in the American Society for Surgery of the Hand. In accordance with the Copyright Act of 1976, the corresponding author of each manuscript will be required to complete a Copyright Transfer Form on acceptance of the manuscript. When submitting a paper the author(s) must make a full statement to the Editor about all submissions and previous reports that might be regarded as prior or duplicate publication of the same or similar work. Copies of such material should be included with the submitted paper to help the Editor decide how to deal with the matter. The *Journal of Hand Surgery* may use and permit others to use data generated from the initiation to the completion of manuscript review, eg, race, sex, and nationality of authors; time from submission to decision(s); time to receipt of revision(s); times to publication; and final decisions.
Role of Funding Source
You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated. Please see http://www.elsevier.com/funding.

Copyright
Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.

For gold open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (more information). Permitted third party reuse of gold open access articles is determined by the author's choice of user license.

Author rights
As an author you (or your employer or institution) have certain rights to reuse your work. More information.

Elsevier supports responsible sharing
Find out how you can share your research published in Elsevier journals.

Funding body agreements and policies
Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some funding bodies will reimburse the author for the gold open access publication fee. Details of existing agreements are available online.

Green open access
Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our green open access page for further information. Authors can also self-archive their manuscripts immediately and enable public access from their institution’s repository after an embargo period. This is the version that has been accepted for publication and which typically includes author-incorporated changes suggested during submission, peer review and in editor-author communications. Embargo period: For subscription articles, an appropriate amount of time is needed for journals to deliver value to subscribing customers before an article becomes freely available to the public. This is the embargo period and it begins from the date the article is formally published online in its final and fully citable form. Find out more.

This journal has an embargo period of 12 months.

Language Services
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop http://webshop.elsevier.com/languageediting/ or visit our customer support site http://support.elsevier.com for more information. Authors are responsible for the cost associated with using an editing service. Use of an editing service does not guarantee acceptance of the manuscript.

Informed consent and patient details
Studies on patients or volunteers require ethics committee approval and informed consent, which should be documented in the paper. Appropriate consents, permissions and releases must be obtained where an author wishes to include case details or other personal information or images of patients and any other individuals in an Elsevier publication. Written consents must be retained by the author but copies should not be provided to the journal. Only if specifically requested by the journal in
exceptional circumstances (for example if a legal issue arises) the author must provide copies of the consents or evidence that such consents have been obtained. For more information, please review the Elsevier Policy on the Use of Images or Personal Information of Patients or other Individuals. Unless you have written permission from the patient (or, where applicable, the next of kin), the personal details of any patient included in any part of the article and in any supplementary materials (including all illustrations and videos) must be removed before submission.

Submission
Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

Submit your article
Please submit your article via http://ees.elsevier.com/jhs/.

PREPARATION

Peer review
This journal operates a double blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. More information on types of peer review.

Double-blind review
This journal uses double-blind review, which means the identities of the authors are concealed from the reviewers, and vice versa. More information is available on our website. To facilitate this, please include the following separately:

- Title page (with author details): This should include the title, authors' names, affiliations, acknowledgements and any Declaration of Interest statement, and a complete address for the corresponding author including an e-mail address.
- Blinded manuscript (no author details): The main body of the paper (including the references, figures, tables and any acknowledgements) should not include any identifying information, such as the authors' names or affiliations.

Organization of the manuscript
Manuscripts not complying with these requirements will be returned to the author(s) for appropriate formatting modifications prior to review. Since the authors' identities are withheld from the reviewers, include the authors' names only on the title page. For blinding purposes, submit the manuscript as 2 separate files: the title page as 1 file and the manuscript, without author names, as another file. Double space lines throughout (including the list of references, tables, and figure legends) with 2.5-cm margins all around. Use continuous numbering to number each line in the margin. Arrange the manuscript as follows: title page, abstract, body of the manuscript, references, figure legends, tables, figures. Organize the body of the manuscript as follows: for peer-reviewed scientific studies, the sections are introduction, materials and methods, results, and discussion. JHS scientific articles do not include a conclusion section. For review articles, include historical background (introduction), specific subheadings for the main body of the text, and a summary.

Essential Title Page Information
- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Manuscripts should have no more than 6 authors. A greater number requires justification. Where the family name may be ambiguous (eg, a double name), please indicate this clearly. Present the authors’ affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author’s name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
- **Author degrees.** Include the authors' highest academic degrees, both abbreviated and spelled out (maximum two). Exclude professional certifications such as CHT, RN, and RPT. The sequence of the authors' degrees is of the authors' choosing.
• **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication and also postpublication. Ensure that phone numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address. Contact details must be kept up to date by the corresponding author.

• **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a "present address" (or "permanent address") may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main affiliation address. Superscript Arabic numerals are used for such footnotes.

• **Running head.** On the title page, provide a short title of no greater than 45 characters, including spaces, for the running head.

• **Key words.** On the title page, list up to 5 key words in alphabetical order. Use American spelling and avoid general and plural terms and multiple concepts (avoid, for example, "and", "of"). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

• **Acknowledgements.** List here those individuals who provided help during the research (eg, providing language help, writing assistance or proof reading the article, etc). The person(s) receiving the proposed acknowledgement must give approval to the author for the publication of their name(s). *Note:* If you received a grant from the American Foundation for Surgery of the Hand, then please acknowledge that grant on your Title Page.

**Abstract**

Do not include footnotes, statistical results, or references in the abstract. Type the abstract on a separate page. For peer-reviewed clinical studies, submit a structured abstract limited to 300 words and divided into 5 sections: Purpose, Methods, Results, Conclusions, and Level of Evidence (see table http://www.elsevier.com/__data/promis_images/jhsachart.gif). For peer-reviewed basic science studies, submit a structured abstract limited to 300 words divided into 5 sections: Purpose, Methods, Results, Conclusions, and Clinical Relevance. For review articles and case reports, submit a brief one-paragraph description of the manuscript contents.

**Article structure**

Restrict the manuscript to fewer than 3,000 words. In both the abstract and in the main body, avoid claiming priority of findings. For example, avoid statements such as, "This paper is the first to report..." Formatting, such as Greek letters, italics, superscripts, and subscripts, may be used. The coding scheme for such elements must be consistent throughout.

Articles may use section subheadings within the following headings to clarify content.

**Introduction**

In fewer than 500 words and in 3 to 4 paragraphs, include the study's background, rationale, questions or hypotheses posed, and novelty. Each of the questions or hypotheses should be sufficiently important to appear in the abstract.

**Materials and methods**

Present the study design clearly. Identify and describe the measurement parameters. Describe statistical methods with enough detail to enable a knowledgeable reader with access to the original data to verify the reported results. When possible, quantify findings and present them with appropriate indicators of measurement error or uncertainty (such as confidence intervals). Avoid sole reliance on statistical hypothesis testing, such as the use of *P* values, which fails to convey important quantitative information.

**Statistical methods** should be described in detail, with particular emphasis on the statistical strategy that was used to analyze the data. The most appropriate strategy fits the collected data and addresses the research question/hypothesis stated in the Introduction.

In the analysis of categorical data, utilize exact methods wherever possible. Where the variable of interest cannot be assumed to have a normal distribution, use non-parametric methods of analysis. Report results with only as much precision as is of value. In general, the approach suggested in Bailar JC 3rd, Mosteller F. Guidelines for statistical reporting in articles for medical journals. Amplifications and explanations. *Ann Intern Med.* 1988;108:266-273 should be used.

*P* values are required to support any statement indicating a statistically significant difference.
Ninety-five percent confidence intervals are required for any estimate appearing in the text or graphs. Use of the word correlation requires reporting of the correlation coefficient.

Do not identify any statistical software unless some aspect of the analysis was uniquely dependent on a particular software package.

Validated outcome instruments should be used wherever possible. Novel measurement scales should be used only if existing scales are deemed insufficient in some way to the needs of the study. References to psychometric characteristics of new scales, such as those related to reliability, must be included. If an outcome system leads to a categorical ranking (excellent, good, etc.), then the aggregate score for each patient should be provided.

**Results**

In less than 500 words, present the findings in the same order that you pose the questions or hypotheses in the Introduction. Data should be presented only once, in a text, table, or graph.

**Discussion**

In fewer than 1,000 words, briefly restate the rationale and the questions, then explore major limitations and compare and contrast the study’s results with previous work. Include 1 paragraph for each question or hypothesis. Synthesize the current results with those previously published. It is the *Journal of Hand Surgery*’s style not to include a Conclusion section since this is typically redundant with the abstract.

**References**

Authors are responsible for verifying the accuracy and completeness of references. References should not be merely a listing of the results of a computerized literature search but should have been read by the author and deemed pertinent to the manuscript. Type references double-spaced on pages separate from the text and number them consecutively by the order of their citation in the text. Identify references with (consecutive) superscript Arabic numerals. Do not use an automated end notes system or automatic list numbering because these features are lost when converting the manuscript into the form necessary for publication.

As of October, 2012, the *Journal of Hand Surgery* requires references to be formatted according to the latest edition of the American Medical Association's Manual of Style (http://www.amamanualofstyle.com).

Do not cite meeting abstracts, personal communications, or unpublished material (including oral and poster presentations, correspondence club letters, and manuscripts not yet accepted for publication) in the reference list. If critical to the manuscript's message, cite this material in the text within parentheses.

References should be made to source material and not to review articles in which a particular reference may have been mentioned. Review articles should only be referenced if they represent either a meta-analysis or a systematic review which has resulted in a conclusion.

If a reference source is not yet published but has been accepted for publication, include the source in the reference list and submit the letter of acceptance along with the manuscript.

**Text:** Indicate references by (consecutive) superscript arabic numerals in the order in which they appear in the text. The numerals are to be used outside periods and commas, inside colons and semicolons. For further detail and examples you are referred to the AMA Manual of Style, A Guide for Authors and Editors, Tenth Edition, ISBN 0-978-0-19-517633-9 (see http://www.amamanualofstyle.com).

**List:** Number the references in the list in the order in which they appear in the text.

**Examples:**
Reference to a journal publication:
Reference to a book:
Reference to a chapter in an edited book:

Citations in text
Please ensure that every reference cited in the text is also present in the reference list (and vice versa).

Reference linking requirements
Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is encouraged.

Web references
As a minimum, the full URL and the date when the reference was last accessed should be given. Any further information, if known (DOI, author names, dates, reference to a source publication, etc), should also be given. Web references can be listed separately (eg, after the reference list) under a different heading if desired or can be included in the reference list.

Tables
Number tables consecutively in accordance with their appearance in the text. Place footnotes to tables below the table body and indicate them with a superscript symbol, not letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article. Double-space table data. Each table should be on a separate page. Submit lengthy tables and extended data for publication as supplementary material in the online journal.

Artwork
All figures and illustrations should be oriented so the distal component (eg, the fingertip) is at the top. The names of the subject, author, or institution must not appear anywhere on the figure. Figure numbers must correspond with the order in which figures occur in the text. Obscure the identity of any person included in a photograph or include the person's written permission to be identified.
If a figure has been published, acknowledge the original source and submit written permission from the original copyright holder to reproduce the material before the manuscript is submitted to production. Authors are responsible for applying for permission for both print and electronic rights for all borrowed materials and are responsible for paying any fees related to the applications of these permissions.

Electronic artwork
General points
• Make sure you use uniform lettering and sizing of your original artwork.
• Embed the used fonts if the application provides that option.
• Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
• Number the illustrations according to their sequence in the text.
• Use a logical naming convention for your artwork files.
• Provide captions to illustrations separately.
• Size the illustrations close to the desired dimensions of the printed version.
• Submit each illustration as a separate file.
A detailed guide on electronic artwork is available on our website: http://www.elsevier.com/artworkinstructions

You are urged to visit this site; some excerpts from the detailed information are given here.

Formats
If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.
Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):
EPS (or PDF): Vector drawings, embed all used fonts.
TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

Please do not:
- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

Color artwork
Submit color illustrations as original photographs, high-quality computer prints, or transparencies, close to the size expected in publication. Please make sure that artwork files are in an acceptable format TIFF (or JPEG) or EPS format. Color images must be CMYK and at least 300 DPI. Gray scale images should be at least 300 DPI. Apply any digital manipulation of an image (e.g., brightness, color, or contrast) to the whole image in order not to misrepresent the original image. Enhancement or masking of a portion of an image is unacceptable unless clearly and completely explained in the legend. Use professionally produced arrows or other markers placed directly on the figure to identify important features. Do not write on the illustrations. Crop figures as necessary to emphasize the subject material. Do not include photographs or x-rays of normal findings. Submit line art with no gradations of shading, as they will not reproduce well. Use cross-hatching or patterns where shading is necessary. Artwork and photographs submitted in color will be reproduced in full color in the Journal at no charge to the authors. Please see instructions for submitting digital art at http://ees.elsevier.com/jhs. To create the art, use graphics software such as Photoshop and Illustrator, not presentation software such as PowerPoint, Corel-Draw, or Harvard Graphics. Combinations of gray scale and line art should be at least 1,200 DPI. Line art (black and white or color) should be at least 1,200 DPI. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color on the Web (e.g., ScienceDirect and other sites) in addition to color reproduction in print. For further information on the preparation of electronic artwork, please see http://www.elsevier.com/artworkinstructions.

Illustration Services
Elsevier's WebShop (http://webshop.elsevier.com/illustrationservices) offers Illustration Services to authors preparing to submit a manuscript but concerned about the quality of the images accompanying their article. Elsevier's expert illustrators can produce scientific, technical and medical-style images, as well as a full range of charts, tables and graphs. Image 'polishing' is also available, where our illustrators take your image(s) and improve them to a professional standard. Please visit the website to find out more.

Figure captions
Number figures consecutively in accordance with their appearance in the text. Ensure that each illustration has a caption. On a page separate from the body of the manuscript, type figure legends double-spaced. Number the figures with Arabic numerals in the order cited in the text. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Provide sufficient explanation to render the figure intelligible without reference to the text. Define all symbols and all abbreviations not yet spelled out in the text. For reproduction of any copyrighted material, include written permission from the copyright holder.

Video data
Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the files in one of our recommended file formats with a preferred maximum size of 150 MB. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect: http://www.sciencedirect.com. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages at
All video clips will be subject to peer review. The American Society for Surgery of the Hand will hold the copyright on all video clips published on the Journal's website. Each coauthor of a video clip must sign a form, obtainable from the Editorial Office, expressly transferring copyright in the event that we publish the video clip on the Journal's website. Peer review will proceed when the Editorial Office has received the signed copyright releases. The Journal can accept only video submissions that meet the Journal's formatting and image quality requirements. Authors will be notified if there are any problems with submitted files and asked to resubmit modified files. Image editing and correct formatting are the author's responsibility.

**Supplementary data**

Elsevier accepts electronic supplementary material to support and enhance your scientific research. Supplementary files offer the author additional possibilities to publish supporting applications, high-resolution images, background datasets, sound clips and more. Supplementary files supplied will be published online alongside the electronic version of your article in Elsevier Web products, including ScienceDirect: [http://www.sciencedirect.com](http://www.sciencedirect.com). In order to ensure that your submitted material is directly usable, please provide the data in one of our recommended file formats. Authors should submit the material in electronic format together with the article and supply a concise and descriptive caption for each file. For more detailed instructions please visit our artwork instruction pages at [http://www.elsevier.com/artworkinstructions](http://www.elsevier.com/artworkinstructions).

**Data references**

This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

**Reference management software**

Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley and Zotero, as well as EndNote. Using the word processor plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:

When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

**Research data**

This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.
Data linking
If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the database linking page.

For supported data repositories a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

Mendeley Data
This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to Mendeley Data. The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the Mendeley Data for journals page.

Data statement
To foster transparency, we encourage you to state the availability of your data in your submission. This may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you will have the opportunity to indicate why during the submission process, for example by stating that the research data is confidential. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

Submission checklist
The following list will be useful during the final checking of an article prior to sending it to the Journal for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:
One author has been designated as the corresponding author with contact details:
• E-mail address
• Full postal address
• Phone numbers
All necessary files have been uploaded, and contain:
• Key words
• All figure captions
• All tables (including title, description, and footnotes)
Further considerations
• Manuscript has been spell-checked and grammar-checked
• References are in the correct format for this Journal
• All references mentioned in the Reference list are cited in the text, and vice versa
• Permission has been obtained for use of copyrighted material from other sources (including the Web).

For any further information please visit our customer support site at http://support.elsevier.com.

Style
When not otherwise specified in these Instructions to Authors or in the Journal of Hand Surgery style guide, defer to the guidelines specified in the latest edition of the American Medical Association's Manual of Style (http://www.amamanualofstyle.com).

As a final step before submitting your manuscript, turn on the "Display Readability Statistics" function in Microsoft Word. Instructions to do so are in the Help Menu. Then subject the manuscript to Microsoft Word's Spelling and Grammar checker and consider making the changes it recommends. For instance, JHS encourages active verb forms. On completion of the spelling and grammar check, Microsoft Word
will give you the percentage of sentences with passive verb forms, the Flesch Reading Ease score, and the Flesch-Kincaid Grade Level. Please indicate these 3 scores in your cover letter. Going through this process and reporting the results will make the writing stronger and will facilitate the review process.

**Journal abbreviations and acronyms**
If an abbreviation or acronym appears more than 3 times in the abstract or more than 3 times in the article, spell out an abbreviation or acronym the first time it is used, followed by the shortened version in parentheses. Spell out all abbreviations and acronyms at the beginning of sentences.

**(Nomenclature and) units**
Use Système International (SI) measurements. For clarity, nonmetric equivalents may be included in parentheses following the SI measurements.

**Embedded math equations**
If you are submitting an article prepared with Microsoft Word containing embedded math equations then please read this related support information (http://support.elsevier.com/app/answers/detail/a_id/302/).

**Math formulae**
Present simple formulae in the line of normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., $X/Y$. In principle, variables are to be presented in italics. Powers of $e$ are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

**Drug names**
Use generic names. You may cite proprietary names in parentheses along with the name and location of the manufacturer.

**Permissions**
Obtain and submit written permission for use from the original copyright holder for any lengthy direct quotations, tables, or illustrations taken from copyrighted material. Include the permission in the text, table footnote, or figure legend and provide complete information as to source. Photographs of identifiable persons must be accompanied by a signed release that indicates informed consent.

**Revised Manuscripts**
It is mandatory that the authors of manuscripts re-submitted after revisions systematically answer each and every point raised in the initial review and put their responses in a table that includes a clear description of the exact location in the revised manuscript where changes have been made. A template for the Table of Corrections can be found here.

**AFTER ACCEPTANCE**

**Proofs**
One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author (if we do not have an e-mail address then paper proofs will be sent by post) or, a link will be provided in the e-mail so that authors can download the files themselves. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to download the free Adobe Reader, version 9 (or higher). Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the Adobe site.

If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return them to Elsevier in an e-mail. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and scan the pages and return via e-mail. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. We will do everything possible to get your article published quickly and accurately. It is important to ensure that all corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

**Offprints**
Paper offprints can be ordered via the offprint order form, which is sent once the article is accepted for publication. Both corresponding and coauthors may order offprints at any time via Elsevier's WebShop (http://webshop.elsevier.com/myarticleservices/offprints).
Authors requiring printed copies of multiple articles may use Elsevier WebShop’s 'Create Your Own Book' service to collate multiple articles within a single cover (http://webshop.elsevier.com/myarticleservices/offprints/myarticlesservices/booklets).

**Offprints**
The corresponding author will, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's Webshop. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

**Level of evidence for primary research question: types of clinical studies**

**AUTHOR INQUIRIES**
Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch. You can also check the status of your submitted article or find out when your accepted article will be published.