

Information to authors

During recent years, *Acta Orthopaedica Scandinavica* has allocated increased editorial work to help authors express their message clearly and succinctly. We hope to serve authors and readers alike by communicating solid observations at the expense of empty phrases. This trend is a natural evolution of scientific expression, necessary in the stiffening competition for attention. This does not at all mean that we prefer short articles—only that most articles become relatively short after resection of redundant, notably repetitive material.

Manuscripts should meet the general requirements agreed upon by the International Committee of Medical Journal Editors¹, known as the Vancouver System, and which has been adopted by leading medical journals.

In addition, *Acta Orthopaedica Scandinavica* has certain specific requirements enforced by the need for precision in orthopedic definitions and vocabulary. If you study recent issues of *Acta*, as well as one of the standard publications listed below^{2–4}, and read carefully the following instructions, you should have no problems producing a manuscript that is technically suitable for publication. Copy editing is based on Huth⁵.

Submission of manuscripts

Address manuscripts to our office at Department of Orthopedics, Gentofte Hospital, DK-2900 Hellerup, Denmark.

Submit *three copies* of the manuscript, also figures and tables, to facilitate distribution to referees. Each part of the manuscript should begin on a new page in the following sequence: Title page, Abstract, Text, Acknowledgements, Tables with titles, Legends to Figures, References. The pages should be numbered consecutively starting with the title page, and the first author's name should appear on all the pages. The manuscript must be double spaced with margins of at least 25 mm on all four sides of all the pages.

Give the address, telephone number and telefax number of the author responsible for correspondence.

Previous or parallel publications on the same subject by the author(s) should be submitted with the manuscript. This is necessary for two reasons, (1) to avoid double publications, and (2) to provide the reviewers with essential information.

Title page

The title is the most important summary of a scientific article. *Acta* prefers titles that are expressive rather than neutral. In a report on the Ason procedure, we prefer the title "No effect of the Ason procedure..." rather than "Effect of the Ason procedure..." if, indeed, the Ason procedure had no effect! The title should also include information on the scope of the investigation. For example, our February, No. 1 issue, 1992, had 15 original, clinical articles. All had a title or subtitle which stated the number of patients, usually also the average follow-up time.

If animal or cadaver experiments are reported, the title or subtitle should include this information.

The first name, middle initials(s), and last name of each author should be given with superscript digits indicating departmental affiliations. The name, address, and telephone (telefax) number of the author responsible for correspondence regarding the manuscript must be given. In the published version, the name and address of the author to whom requests for reprints should be addressed is usually shown separately, but only if not the first author.

Abstract

The abstract should not exceed 200 words. The abstract should be informative, i.e., state briefly the contents of the article. The sequence of its contents should closely follow that of the article. Key words are no longer used.

Introduction

The nature of the problem should be briefly introduced with particular emphasis on the state of knowledge at the beginning of the investigation followed by a short description of the aim. The introduction should rarely exceed one typewritten page. Most of our readers have a rather extensive knowledge of orthopedics; e.g., they know that hip fracture is common in the elderly and that the Charnley arthroplasty of the hip has proven a great benefit to mankind, etc.

Patients/materials and methods

This section need not be brief. It is important to specify exactly how the patients were selected. The patients must be characterized in detail so that there will be no questions about uncontrolled variables. Explain why some patients were dropped from the follow-up and analyze whether they were representative or not of the primary series. A follow-up close to 100 percent is required in most studies. The follow-up time should rarely be less than 2 years; for some procedures, i.e., knee ligament surgery, 5 years is usually required. For animals, the species, sex, age, breed, and physiologic state should be given.

Statistics: An adequate statistical analysis is a necessary part of most communications. Specify the statistical methods. The mean or median may be followed by the range within parentheses. For example, 60 (35-70) years old means that the youngest patient was 35 years old and the oldest 70 years old.

Results

This section should not contain material that belongs to Methods or Discussion. The need for brevity must not violate the requirement that all the results are given. For example, even though patients, animals, and various measurements should often be lumped into comparable groups, subsequent research on the same problem requires access to all individual observations⁶. Such information can be presented in a large general table often in code form: see *Acta Orthop Scand* 1992; 63 (1): 58, 75, 86, 92 for representative examples. The main outcome of the experiment or the observations should be verbalized with reference to tables and figures where the details are documented; information concerning significance and other statistical data should preferably be given in the tables and figures. Do not write "It is shown in Table 1 that the outcome of Group A was better than that of Group B." Write "The outcome of Group A was better than that of Group B (Table 1)."

Discussion

This section has two main functions: assessment of the results for their validity and of relevant literature giving evidence or counterevidence for your findings; and assessment of the implication of the conclusions for clinical application or further research.

Discuss, do not recapitulate, your results.

Tables

Tables should have Arabic numerals. Each table should be typed on a separate sheet of paper. Each table should be self-explanatory with an adequate title and a logical presentation of data. The title should not repeat the information carried by the headings.

Use tables when the reader wants the exact values of more data than can be summarized in a few sentences in the text.

Use tables instead of case reports unless very few cases are presented. Avoid repetitive words in the columns. Such data should be coded as figures or letters as in general tables.

Never present the same data in more than one way; present data in the text, *or* in a table, *or* in a figure.

Data should be organized so that like elements read downward, not across. The data arranged in columns should correspond to the time sequence of their collection when read from left to right.

Age	Sex	Symptoms	Physical findings	Radio-graphs	Treat-ment	Out-come
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Each column heading for numerical data should include the unit of measurement applied to all the data under the heading. Choose suitable SI units, so that the values given in the table fall within the range 0-999. Large numbers can be expressed in smaller units with appropriate column headings.

Population (thousands)	rather than	Population
140 1.3		140 000 1 300

Do not use headings such as $\times 10^3$ for thousands; it is not clear whether the data given should be or already have been multiplied by that factor. Consider carefully with how many digits your numerical findings should be given. Contrary to theoretic physics and astronomy, the precision of biologic measurements seldom allows for more than 2 digits. Much time is spent in the editorial office crossing over meaningless decimals!

Unnecessary columns of data that can easily be calculated from other results in the table should not be included.

Tabular footnotes should be indicated with superscript lower-case letters.

Do not draw vertical lines in the tables.

Figures

All diagrams, line drawings, and photographs constitute figures and must be numbered in sequence with Arabic numerals. Legends to figures should be listed on a separate numbered sheet, identified by the title of the paper and the first author's name. The legend of a figure should contain the following information:

1. The word figure followed by the number.
2. A short description of the figure.
3. Explanation of symbols and findings, if needed.
4. For photomicrographs, degree of enlargement, information regarding staining technique, etc. (e.g., HE, $\times 100$).

Text within the figure is permissible only if absolutely necessary.

Figures should be professionally drawn and photographed; freehand or typewritten lettering is unacceptable. Most figures can be properly shown in the width of the column, i.e., 70 mm. Figures should be submitted as sharp, glossy black-and-white photographic or high-quality laser prints in exactly this format. For this format a suitable line thickness of 0.17–0.35 mm, and a suitable type size for capital letters is 1.5 mm. Helvetica Regular is the recommended type style.

Each figure should have a label *pasted* on the back indicating the number of the figure, the title of the paper, the name of the first author, and the top of the figure. When a figure has several parts, e.g., A, B, C, this should *not* be indicated on the figure itself, but *on the label*. Several figures related to the same patient, e.g., radiographs at different times, should be labelled Figure 1 A, B, C ... and not Figures 1, 2, 3

Diagrams are pictorial tables^{8,9}. Your choice is to give the reader exact numerical data or a picture of the trend of the data. If the data show obvious trends, use a diagram; otherwise, a table or text should be satisfactory. The graphic illustrations of sets are provided by Venn diagrams (*Acta Orthop Scand* 1984; 55 (2); 144).

Symbols should be consistent throughout a series of figures. ○ ● △ ▲ □ ■ * + reproduce well. Different types of connecting lines can also be used.

The axes should be *equal in length* to make the diagrams *square*. They should normally be thinner than the curve lines. Each axis should be labeled with a description of the variable it represents. Use capitals only for the first letter in the first word. The labeling should be horizontal for both axes. The text for the y-axis should not overshoot the figures of the axis to the left. All the units should be expressed in SI units (normally in parentheses). Make liberal use of scale markings, directed outwards, but identify only a few with numbers. Axes should not extend beyond the last numeral and never be terminated by arrows.

Choose units so that the values expressed are between 0 and 999. All the values on a given axis should have the same number of decimals. When the axes are labeled in percent, spell out this word. Percentage figures are not allowed when the total number of a sample is less than 100. If an axis is not continuous, this must be indicated by a clearly marked interruption.

Radiographs should be cropped to present only what is essential. It is rarely necessary to show normal radiographs, even for purposes of comparison. Frontal and lateral projections should be in the same scale and density. Corresponding details, e.g., the joint space should be at the same level. To facilitate editorial cropping, the prints should be twice the format intended for publication.

Color illustrations are preferred to illustrate a particular feature that cannot be made clear by other techniques; the cost of color will be borne by *Acta*. The author must explain why a photomicrograph should not be reproduced in color. Original transparencies and three sets of color prints in the suggested format for printing should be submitted.

Acknowledgements

Technical help and economic or other sponsorship may be acknowledged.

References

Acta Orthopaedica Scandinavica uses the *Vancouver system*⁷ of reference formatting. However, we prefer the references to be cited by name and year (chronologically) of publication in the article text instead of sequentially numbered references. Thus, the references should be ordered alphabetically.

The style and abbreviations of journals should follow the style used in *Index Medicus*, e.g., book chapters, symposia, proceedings, congress abstracts; further, please submit a *copy of the front page* to secure correct bibliographic information notably publisher, year of publication, editor(s), and pages.

References in the text

- One author: (Penning 1968).
Two authors: (Coonrad and Pohlman 1969).
Three or more authors: (Ishiguro et al. 1978).

References in the reference list

Article

Coonrad R W, Pohlman M H. Impacted fractures in the proximal portion of the proximal phalanx of the finger. *J Bone Joint Surg (Am)* 1969; 51 (7): 1291-6.

Book

Penning L. Functional pathology of the cervical spine: Radiographic studies of function and dysfunction in congenital disorders, cervical spondylosis and injuries. Excerpta Medica Foundation, Amsterdam 1968.

Chapter

Allieu Y. External fixation in osteoarticular surgery of the hand. In: *The hand* (Ed. Tubiana R). W. B. Saunders Co. Philadelphia 1985; 2: 525-34.

Supplement

Wingstrand H. Transient synovitis of the hip in the child. *Acta Orthop Scand (Suppl 219)* 1986; 57: 1-61.

Thesis

Edwall G. Stable and reproducible antimony-antimonyoxide electrodes. Thesis, Royal Technical High School, Stockholm, Sweden 1976.

"Read at"

Matiev I. B. Gradual elongation of the first metacarpal as a method of thumb reconstruction. Read at the 23rd Meeting of the British Hand Club, Lausanne, Switzerland 1967.

"In proceedings"

Ishiguro T, Itoh Y, Uchinishi K, Imai N. An experimental and clinical study on Kienböck's disease. In: *Proceedings of the Twenty-first Annual Meeting of the Japanese Society for Surgery of the Hand*, Nagoya, Japan 1978: 32-3.

Acta idiosyncracies

Our specialty is always written simply as *orthopedics* as introduced by Nicolas Andry in 1741. The expression *orthopedic surgery* is historically false and suggests a subspecialty of *surgery*. However, the Latin

spelling *orthopaedica* is retained in the name of our journal.

Use these words

Arthrosis rather than osteoarthritis, because the arthroplasties have enforced the distinction between noninflammatory and inflammatory arthropathies, notably rheumatoid arthritis.

Radiography (-ic) rather than radiology (-ic) for conventional examinations, because radiology now includes roentgen stereophotogrammetry, ultrasonography, radionuclide scintimetry (scintigraphy), computed tomography, magnetic resonance imaging, infrared heat measurements, etc.

Percent should be spelled out; do not use % in the text. Percentage figures are not allowed when the total number of a sample is less than 100. Otherwise, use the absolute numbers, decimal fractions, or one third, three quarters, etc. Percentages above 10 should not be given with decimals.

Do not use *sacrifice*, because putting animals to death or simply killing them for scientific purposes has no religious connotation.

Averages should be given without decimals.

Abbreviations should rarely be used except as they occur in standard general and medical dictionaries. Abbreviations often cause more confusion than they save space. Note that some "accepted" abbreviations are rather irritating; e.g., ACL, PCL, MCL, and LCL, where C does not have a consistent meaning and all four expressions share two of the three letters. See *Acta Orthop Scand* 1987; 58: 240-4, 58-61 for how the knee ligaments can be described without abbreviations except in tables where the initials will be sufficient.

Histograms are seldom indicated; instead, present the data in tables or diagrams.

Spelling and usage

American spelling and usage are preferred by *Acta*⁷. For example, anatomic, center, color, tumor, pathologic, orthopedic, morphologic, histologic (suffix "-ic" preferred to "-ical" when possible), program, meter, favor, nonunion, labor, anemia, hematoma, anesthesia, at the hospital, postoperative, intraarticular, labeled, and so on. This policy, however is not rigorously enforced, especially as regards British authors.

Manuscript review

Manuscripts received in our Gentofte, Denmark, office are acknowledged with a postcard informing the author of the manuscript number. The manuscripts are then sent to one of the coeditors for evaluation with the aid of one or more reviewers. Within 3 months, the author should receive a letter stating whether the article has been rejected or with suggestions for revision; it is very rare that an article is accepted directly, and often more than one round of correspondence is needed before a final decision can be made. This procedure may be both irritating and time consuming; it is used to aid the authors in their desire to communicate their unique experience.

After final revision the authors are encouraged to submit a MS-DOS or Macintosh word processor on a 5.25 inch or 3.5 inch floppy disk together with the printed copy of the manuscript. This procedure will make publication more accurate and rapid¹⁰. The authors will receive page proofs that should be returned to the Lund office in Sweden with the least possible delay.

Reprints

50 reprints without covers of each article will be supplied to the authors free of charge. Additional reprints can be supplied if ordered on the reprint order form that accompanies the proofs.

Why free reprints? The reason for the free reprints is to stimulate the scientific dialogue between our authors and those they have quoted. It is good scientific decorum to send a reprint to all the cited authors. It is poor use of expensive reprints to just use them in conjunction with research applications.

Proceedings

Acta Orthopaedica Scandinavica has a long tradition of publishing the proceedings of the Scandinavian and other national orthopedic meetings. During recent years, we have expanded this section to also include some international meetings of subspecialty and supraspecialty societies, for example, the Scandinavian Foot Society, special meetings sponsored by our parent organizations, and summaries of academic theses. Proceedings are published in two annual supplements—one in the spring/summer and one in the autumn/winter.

Supplements

For more than 50 years, our subscribers have received, on an average, one supplement every third month. By sheer volume, the supplements thus constitute an important part of our journal. In terms of content, the supplements represent a unique feature in the publication of orthopedic research, both clinical and experimental.

An article or a series of articles may be accepted for publication as a supplement. This applies particularly to papers that have academic status, notably the doctoral thesis or other papers of national or international import, for example, award-winning papers. Acceptance is dependent on normal editorial review, and supplements are copy edited and produced with application of standards outlined above. The cost of publication is partly defrayed by *Acta* for members of the Scandinavian Orthopedic Association and The Netherlands Orthopedic Society, but even others may expect substantial economic aid for particularly expensive procedures, for example, printing of color illustrations. Authors are requested, as early as possible, to contact the Editor who will provide the necessary information concerning eligibility and details concerning number of copies, cover, and the like.

Recommended reading

1. International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. *Br Med J* 1988; 296: 401-5.
2. Day R A. *How to write and publish a scientific paper*. ISI Press, Philadelphia 1979.
3. Huth E J. *How to write and publish papers in the medical sciences*. ISI Press, Philadelphia 1982.
4. CBE Style Manual Committee. *Council of biology editors style manual*. A guide for authors, editors and publishers in the biological sciences. Council of Biology Editors, Inc. Bethesda 1983.
5. Huth E J. *Medical style and format*. ISI Press, Philadelphia 1987.
6. Multicenter investigations: The role of orthopedic journals. (Editorial). *Acta Orthop Scand* 1988; 59 (3): 247.
7. *The American heritage dictionary*. Houghton Mifflin Company, Boston 1985.
8. *Charts and graphs: Guidelines for the visual presentation of statistical data in the life sciences*. (Ed. Simmonds D.). MTP Press Ltd, Lancaster 1980.
9. Tufte E R. *The visual display of quantitative information*. Graphics Press, Cheshire CT, U.S.A. 1977.
10. Desktop publishing. (Editorial). *Acta Orthop Scand* 1988; 59 (6): 627.