Information to authors

During several 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 omission of redundant—particularly repetitive—material.

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

Authors submitting a paper do so on the understanding that the work has not been published before in any language, is not being considered for publication elsewhere, and has been read and approved by all authors. The submission of the manuscript by the authors means that the authors automatically agree to assign exclusive copyright to *Acta Orthopaedica Scandinavica* if and when the manuscript is accepted for publication.

Submission of manuscripts

Address manuscripts to our office at Copenhagen University Hospital–Rigshospitalet 3072, Blegdamsvej 9, DK-2100 Copenhagen Ø, 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, Acknowledgments, References, Tables with titles, Legends to Figures. The pages should be double spaced, numbered consecutively, and the first author's name should appear on all the pages. American spelling and usage are preferred by *Acta*.

Illustrations, but not the manuscript, will be returned if the article is rejected.

Although reviewer selection is ultimately the decision of the Editor, authors are encouraged to provide the names, addresses, and telephone number of potential reviewers.

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

Acta prefers titles that are expressive rather than neutral. The title should include information on the scope of the investigation, e.g., the number of patients, the average follow-up, animal or cadaver experiments.

The first name, middle initial(s), and last name of each author should be given with indication of departmental affiliations. The name, address, and telephone and telefax number of the author responsible for correspondence regarding the manuscript must be given.

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.

Patients/material/animals and methods

This section need not be brief. It is important to specify exactly how the patients were selected. The patients must be described in detail so that there will be no questions about uncontrolled variables. Explain why some patients were dropped from the follow-up and whether or not they were representative of the primary series. For animals, the species, sex, age, breed, and physiologic state should be given.

Statistical guidelines

Statistical evaluation is a vital part of many communications. These guidelines have been written for the benefit of sound scientific work and to help authors prepare their manuscripts in accordance with good statistical standards. The guidelines are applicable to

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retrospective clinical studies as well as to experimental studies, randomized clinical trials and epidemiological studies. However, all aspects are not equally important for all types of studies. For instance, randomized clinical trials typically include a given number of patients based on calculations of statistical power. In exploratory experimental studies, the number of units studied may be based on other considerations, but may still be justified.

The following general principles should also be followed: The investigator should ensure that his data are of high quality. All data should also be stored and retrievable at request. The use of a statistical method presupposes appropriate knowledge and understanding. Presentation of statistical results should focus on their clinical, not statistical, importance.

Introduction—State clearly the aim of the study and the primary hypothesis.

Patients and methods—State the number of subjects studied and why this number was chosen. Describe the sources of subjects, how the subjects were selected and the inclusion or exclusion criteria that were employed. Present information on subjects who declined to participate, withdrawals and subjects with incomplete follow-up.

Describe in detail how measurements were made and techniques used. All statistical methods should be mentioned and, when necessary, (for unusual methods) referenced; for every statistical result, the method used should be clearly described. All tests should be two-sided, unless the use of one-sided tests is specifically justified.

No data should be removed, imputed, weighted, adjusted or trimmed unless this action is specifically described and justified and its consequences are presented.

Use nonparametric techniques when data have been measured on an ordinal scale or on an interval scale or non-normality is suspected and normality cannot be induced by transformation. In addition, for small unbalanced data sets with many ties or a poor distribution, exact methods may be needed to produce reliable results.

Matched data should be analyzed using conditional techniques, e.g. paired t-test, Wilcoxon's signed ranks test, McNemar's test or conditional logistic regression.

When measurements are repeated on the same subject, they should not be treated as independent observations; use repeated measures ANOVA or multilevel models. A possible alternative would be to summarize all values from each subject into an individual estimate of a clinically relevant entity, e.g. the magnitude of a peak value, area under curve, doubling time, etc., and then use these estimates as input in an analysis with one observation per subject.

When multiple hypothesis testing is performed in a study with the aim of confirming a pre-specified hypothesis, care should be taken to avoid spurious significance by using techniques for simultaneous inference.

Results—When summarizing the data, always include measures of variability and the number of subjects. When presenting medians, describe also the range within parentheses, e.g., median age was 60 (35–70) years and when presenting means use standard deviation, e.g. mean age was 59 (SD 15) years. Present the frequencies for nominal data. Results from matched data should be presented in relevant form, e.g., the distribution of pairwise differences.

Hypothesis tests (p-values) should be used in combination with a defined effect size and when statistical power has been considered. Present p-values with real numbers if these are greater than 0.001, otherwise use '$p < 0.001$'. Do not use 'ns', '$p > 0.05$' or asterisks. Use 95% confidence intervals in exploratory analyses and when estimating effects or differences.

Discussion—The discussion section should, when it is relevant, contain a critical discussion about the results. Questions like the quality of the data (selection and information bias) and the adequacy of the statistical analysis (confounding bias) should then be addressed.

Results

The need for brevity must not clash with the requirement that all the results should be given. For example, although data should often be combined into comparable groups, subsequent research on the same problem requires access to all individual observations. Such information can be presented in a general table, often in code form. The main outcome of the experiment or the observations should be reported with reference to tables and figures where the details are documented; information concerning significance and other statistical data should be given in the tables and figures.

Discussion

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

Discuss, do not recapitulate, your results.

Tables

Use tables when the reader wants the exact values of more data than can be summarized in a few sentences in the text. Each table should be self-explanatory with an adequate title and a logical presentation of data. Avoid repetitive words in the columns. Such data should be coded as figures or letters and the code explained in footnotes.

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

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.

Consider carefully the number of digits that should be used for your numerical findings. It is seldom indicated to use more than 2 digits for biologic measurements. Much time is spent in the editorial office crossing out meaningless decimals!

Figures

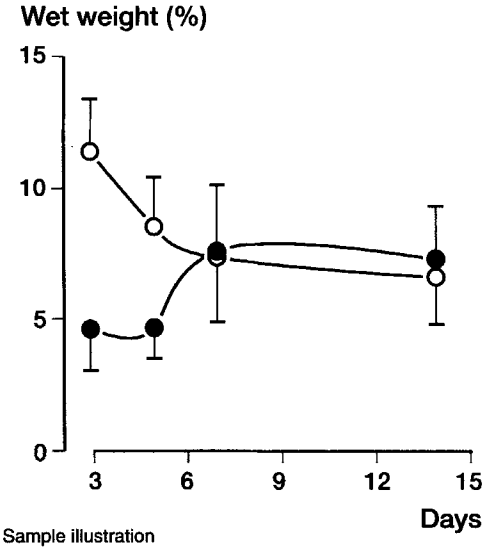
All diagrams, line drawings and photographs are regarded as figures and must be numbered in sequence with Arabic numerals.

Each figure should have a label *pasted* on the back, indicating the number of the figure, the title of the article, 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. To facilitate editorial handling, all figures should be twice the format intended for publication.

Diagrams are pictorial tables. Your choice is to give the reader exact numerical data in a table or a picture of the trend of the data.

Avoid frames around diagrams, diagrams with perspective drawing, and bargraphs or histograms (use tables). Symbols should be consistent throughout a series of figures. ○ ● △ ▲ □ ■ ✱ reproduce well. Different types of connecting lines can also be used. Make diagrams in *black-and-white only,* avoid grey areas and colors. You may suggest colors on a copy of your diagram but the actual colors will be added during the layout process as a separate layer.

The axes should be *equal in length* to make the diagrams *square.* 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. All the units should be expressed in SI units. 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.



Sample illustration

Choose units so that the values expressed are between 0 and 999. If an axis is not continuous, this must be indicated by a clearly demarcated interruption (see Sample illustration).

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.

Color illustrations should be used to illustrate a particular feature that cannot be made clear by other means; the cost of color will be borne by *Acta.* Color print copies should be submitted. Illustrations will not be returned to the authors.

Acknowledgements

Technical help and financial or other sponsorship may be acknowledged.

References

Acta Orthopaedica Scandinavica uses the Vancouver system 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; further, please submit a copy of the front page of each reference to secure correct bibliographic information.

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.

Manuscript review

Manuscripts received in our Copenhagen, 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 disk with the wordprocessor file and also a text only (ASCII) version of the file together with the printed copy of the manuscript. This procedure will make publication more accurate and rapid. The authors will receive page proofs that should be returned to the Lund office in Sweden at the Department of Orthopedics, Lund University Hospital, S-221 85 Lund, 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.

Supplements

An article, a series of articles or a review of 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 Nordic Orthopedic Federation 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, etc.

Proceedings

Since 1989 proceedings and dissertation have been published in a separate supplementum, usually biannually. It is desirable to publish proceedings as quickly after each meeting as possible, but the publication time is mainly dependent upon when the disk with abstracts arrive at the Acta office. We now publish the proceedings also on Internet (http://www.pi.se/acta-orthopscand), as soon as they arrive in the Acta office. We hope authors will use this opportunity to proof read their contributions before they are printed. To read the abstracts, a web-browser with Adobe Acrobat Reader 3.0 (or Adobe Acrobat Exchange) and a PDF-Viewer plug-in are needed.