

Excerpt from JBJS Style Guide

Terminology (last updated 4/1/16)

Age To denote age, do not use the phrase "age sixteen" or "aged sixteen." Instead, use sixteen years old, sixteen years of age, or at the age of sixteen years.

Allogeneous

Do not use. It should be allogeneic or allogenic.

Alpha or beta-streptococcus

Should be alpha or beta-hemolytic streptococcus

Ambulate

It is not necessary to change to *walk*. The terms *ambulate* and *ambulation* are acceptable.

Among, Between

Use "among" instead of "between" to express a relationship among more than two things.

CHANGE The results did not differ between the five groups.

TO The results did not differ among the five groups.

Although *between* relates to only two things, it expresses a one-to-one relationship, regardless of how many things are being compared.

EXAMPLE There were no significant differences between any of the four groups.

And/Or

This construction is acceptable. (It is no longer necessary to change to "X or Y, or both.")

Anulus/annulus

Spell with one "n."

Anulus refers to anus (ring) and annulus refers to annus (year). (Anulus fibrosus refers to the small filamentous ring that surrounds the "fleshy center," or "nucleus pulposus," of the intervertebral disc.)

However, "annular ligament" is correct.

Anterior

(See Direction, Anatomical)

Arthrodesis/Fusion

Although surgeons use the term "fusion" and not "arthrodesis" when speaking to each other, the term "arthrodesis" should be used when referring to the procedure and "fusion" should be used when referring to the result of the procedure. However, if the meaning is clear, it is not necessary to change "fusion" to "arthrodesis."

Assure, Ensure, Insure

The word assure has an element of confidence attached to its meaning that ensure and insure do not. In medical writing, ensure, which means to make certain or to guarantee, is used almost exclusively. The word insure is used only in reference to insurance.

Aseptic

Can be used in all instances; septic should still refer only to systemic infection

Aseptic necrosis

Use the term "osteonecrosis" instead.

At the time of

This phrase is suggested, but not necessary (per 10/10/13 decision), when "follow-up" is used alone (without "examination").

CHANGE The patient was sixteen years old at follow-up.

TO The patient was sixteen years old at the time of follow-up.

The phrase is not necessary when "follow-up examination" is used.

EXAMPLE The range of motion was normal at the follow-up examination.

Be sure to use the phrase when referring to a finding that was not actually tested at the follow-up examination.

EXAMPLE The patient was able to walk 3 km at the time of follow-up.

The phrase is not necessary when referring to an operative procedure.

EXAMPLE ...in specimens obtained at the revision operation.

Avascular necrosis

Use the term "osteonecrosis" instead.

Based on

Actions are not based on something; the action is performed on the basis of something.

CHANGE Based on these results, we recommend the procedure.

TO On the basis of these results, we recommend...

Nouns are based on something.

CHANGE Our conclusions were formulated based on these findings.

TO Our conclusions were based on these findings.

Because of/due to

Distinguish between the phrases.

EXAMPLE:

The fall was due to the ice.

He fell because of the ice.

Below, Under

These words should be used only to refer to position in space. Use less than to refer to lesser or smaller values or quantities.

CHANGE The hematocrit was below 30%.

TO The hematocrit was less than 30%.

Between

(See Among, Between)

Biopsy

This word refers to the removal and examination of tissue, not to the specimen of tissue that is taken for examination.

CHANGE A biopsy was obtained from the lesion.

TO A biopsy specimen was obtained from the lesion.
OR TO A biopsy of the lesion was performed.

Bone cells

Do not change to osseous cells.

Calcaneus

Use instead of os calcis.

Case

Do not use case to mean patient (as this is dehumanizing) or to refer to an operation or a body part.

CHANGE For eight cases, treatment included...

TO For eight patients, treatment included...

OR TO For eight hips, treatment included...

It is acceptable to use case when instance or episode is meant.

EXAMPLE

There were three fractures and four cases of nerve palsy.

Use case, rather than patient, when a numeral is used to refer to one or more in a series, and capitalize the "c" (Case 3).

Cast, Casted, Casting

A limb is not casted; it is immobilized in a cast. The use of the term "casting" is acceptable if *cast application* or *cast immobilization* seems wordy or awkward.

CEDEX Should be all capitals with no comma preceding it.

Celsius/Centigrade

Abbreviate as C, with no space after degree sign (°C)

Cemented

This is acceptable as long as it refers to a prosthesis. Do not use the word to define a procedure.

Cementless

Uncemented and cementless are acceptable. Noncemented may be used, but it is less preferred. We can use "a cementless arthroplasty" because it implies an arthroplasty that is done without cement. However, we cannot use "a cemented arthroplasty" because the cement does not refer to the procedure but to the fixation of the component.

Cite

This word is almost synonymous with mention. To cite a case, therefore, is only to mention it. If an author has reported a case, do not use cite.

Compare with/Compare to

The Journal uses "compare with" or "in comparison with" exclusively. Note that a comma or the word "as" is not necessary before the word "compared."

Complain/Complaint

Although it is acceptable to use "complained" when it indicates an expression of unhappiness, try to avoid overuse as patients shouldn't be presented as "complainers."

A complaint is made by the patient about a disease, injury, symptom, or sign. The disease, injury, symptom, or sign is not in itself a complaint.

CHANGE The complaint resolved after the operation.
TO The symptom resolved after the operation.

Compose, Comprise, Consist

These words are not synonymous. Comprise means to consist of or to be composed of; to include or contain. The whole comprises the parts; the parts do not comprise the whole, they compose it.

Do not use comprise as a passive verb; do not use compose as an active verb,

CHANGE The group was comprised of...
TO The group comprised...

CHANGE The hips composed the group
TO The group was composed of the hips

Computed

This word is not a verb. Use "calculate" instead.

Computed tomographic scan or image

Use instead of computed tomogram. Also, use computed tomography instead of computerized tomography.

Computer-navigated

Use this term when referring to "navigated" total knee (or hip, etc.) arthroplasty.

Computerese

Note the structure of the following words: online, the Internet, World Wide Web, web site, and the Net. The latter phrase is slang, but it may occur, as in "surfing the Net." The point is not that it's preferred usage but rather that the "N" is capped.

Contrast medium

Use this term, not "dye", to refer to the material that is used for radiographic visualization.

Correlate, Correlation

Typically, use these words only when referring to statistical functions. If a p value is given with a statement referring to a correlation, change to association. If no r value is given, change to association. It is no longer necessary to ask for r value.

Cortex

Although the cortex of a bone is a continuous tube, treat it as separate sections. The phrase medial cortex is correct, as are the phrases lateral, posterior, and anterior cortex.

Corticotherapy

Do not use. Change to therapy with corticosteroids.

Culture

"Culture" should not be used to refer to the specimen removed for culture.

CHANGE A culture was taken...
TO A culture specimen was taken...

A culture doesn't grow bacteria; bacteria grow on culture.

Use singular form to denote the process rather than the actual cultures themselves.

EXAMPLE
No staphylococci grew on culture...

Cytokines

Use the abbreviations for the cytokines tumor necrosis factor- α (TNF- α) and interleukin-6 (IL-6). At first mention in the Abstract and in the text, write out in parentheses.

Data

This noun should be treated as plural.

Decade

We often forget that the first decade of life starts at birth. Someone in his or her thirties is not in the third decade of life but in the fourth decade.

Decrease/Increase

Usually, the actual substance or item being measured does not increase or decrease; the level, value, amount, or rate increases or decreases.

CHANGE There was a severe decrease in the serum calcium.

TO There was a severe decrease in the level of serum calcium.

CHANGE Mortality increased 6 percent during the last three years of follow-up.

TO The rate of mortality increased 6 percent during the last three years of follow-up.

Deep venous thrombosis

The term "deep-vein thrombosis" is also acceptable.

Denied

In general, do not use in the context of a patient reporting that a particular symptom has not occurred as it suggests that the patient might be lying.

CHANGE The patient denied that he had had pain in the hand.

TO The patient reported that he had not had pain in the hand.

Die

Use die, not a euphemism such as "succumb," "expire," or "pass away."

CHANGE The patient finally succumbed to the disease.

TO The patient subsequently died of the disease.

However, "deceased" should be used instead of "dead," especially if when it refers to an author who died prior to publication.

Different from/different than

Use different from.

Digits

The thumb is a digit, not a finger; we each have ten digits, but only eight "fingers." This distinction makes it necessary to change "middle finger" to long finger, as four has no exact middle.

Direction, anatomical

When referring to direction in the anatomical plane, do not use such words as above or below. Cephalad and proximal refer to direction above a specific position, and caudad and distal refer to positions below another. Cephalad means toward the head; use it only when referring to the trunk or spine. Use proximal for all body parts except the trunk or spine.

CHANGE No fracture of a vertebra above the eleventh thoracic vertebra was associated with...

TO No fracture of a vertebra cephalad to the eleventh thoracic vertebra was associated with...

CHANGE A tourniquet was applied above the elbow.
TO A tourniquet was applied proximal to the elbow.

Caudad means toward the sacral area. As with cephalad, use only when referring to the trunk or spine. Otherwise, use distal.

CHANGE The thoracic incision was extended one centimeter distally.
TO The thoracic incision was extended one centimeter caudad.

CHANGE Nine lesions were at or below the knee.
TO Nine lesions were at or distal to the knee.

The exceptions are "below-the-knee amputation" and other such catch phrases and idioms.

For such directional adjectives as anterior, inferior, posterior, superior, medial, lateral, upper, lower, left, and right, use such words as aspect, portion, or part if, when direction is used alone, the implication is that one body part is two (or more). An exception to this rule is when referring to a capsule, e.g., the hip or knee capsule. Thus, it is correct to refer to "the lateral capsule" instead of "the lateral aspect of the capsule."

CHANGE The lesion involved the proximal femur.
TO The lesion involved the proximal part of the femur.

CHANGE The upper body ...
TO The upper part of the body ...

CHANGE The left pelvis ...
TO The left portion of the pelvis ...

Hyphenate two directional adjectives when they are used to modify one noun.

EXAMPLE proximal-lateral surface of the stem

Disclaimers

Often, an author will write that something has not been documented previously. Such a statement should be modified with a disclaimer, such as "to our knowledge" or "that we know of," to avoid an onslaught of letters regarding obscure documentation to the contrary.

Discriminatory language

Use nondiscriminatory language. Do not use the masculine pronoun when the gender is unknown; use the plural, he or she (do not use "he/she"), or restructure the sentence. (When the race of a patient is included, it is no longer necessary to ask the author if this information is relevant as there can be both sex and race-based difference in health outcomes.)

Distal

(See Direction, anatomical)

Dose/Dosage

A dose is the quantity that is administered at one time or the total quantity that is administered. The dosage is the repeated administration of doses and is usually expressed in terms of a quantity per unit of time.

Drug

A drug is administered, given, taken, or withdrawn; a drug is not "started" or "stopped", nor is a patient "put on" a particular drug. Drug use, drug therapy, or drug treatment may be started or stopped.

CHANGE The patient was put on prophylactic heparin.
TO The patient was given heparin prophylactically.

Dual x-ray absorptiometry

The word “energy” (dual-energy x-ray absorptiometry; DEXA) has been eliminated from this term, as DEXA is a copyrighted term that has some commercial implications. If dual x-ray absorptiometry is abbreviated in a table or a figure, use “DXA.”

Dye

(See Contrast Medium)

Dynamization

This term is acceptable.

Emergent

Do not use. Change to “emergency.”

Ensure

(See Assure)

Experience

Can be used with reference to pain but it is not preferred.

CHANGE The child experienced pain in the foot.
TO The child had pain in the foot.

Fahrenheit

If author uses Fahrenheit, insert Celsius value in parentheses. (Do not include Fahrenheit value if author provides Celsius value.)

Farther/Further

The word farther refers to distance in space, time, or relationship. Further, as an adjective, means going beyond what exists; as a verb, it means to move forward. Use additionally instead of further in the adjectival sense.

CHANGE No patient needed a further operation.
TO No patient needed an additional operation.

Fatal disease

Use instead of “lethal disease.”

Feel

Do not use to represent a scientific opinion. Instead, use believed, thought, stated, considered, hypothesized, or a similar word. It is acceptable to use feel with respect to patients, such as “the patient felt pain in the foot.” (See Experience)

Female and Male

Use these words as adjectives, not as nouns, unless there is no other sensible way to refer to gender. For example, “A rupture of the Achilles tendon occurs more often in males than in females.”

CHANGE There were ten males and thirteen females.
TO There were ten men and thirteen women. (If it is known all were at least
eighteen years old.)
OR TO Ten patients were male and thirteen were female.

Fewer

Use fewer when referring to a number or an amount that can actually be counted. Use less when the amount cannot be counted.

EXAMPLES

Fewer than twelve patients needed revision.

The operation took less time than we had anticipated.

Use less with a plural measurement that, although countable, indicates a single unit.

EXAMPLES The incision is less than two centimeters long.

Fingers

(See Digits)

Flexor digitorum sublimus

Change to flexor digitorum superficialis.

Fusion

(See Arthrodesis)

Gastrocsoleus

Do not use. Use either gastrocnemius-soleus or gastrocnemius and soleus.

Gender

Do not use. Change to sex.

Gram stain

Use upper case for gram in all instances except gram-negative (or gram-positive) bacteria (which is lower case).

Growth factors

Use the abbreviations for all growth factors, except in titles. At the first mention in the Abstract and in the text, write out the name of the growth factor in parentheses. Growth factors (and other such factors) to write out include: transforming growth factor- α (TGF- α), insulin-like growth factor-I (IGF-I), fibroblast growth factor (FGF), and platelet-derived growth factor (PDGF). See also Cytokines.

Hardware

Use the term "implant" instead of "hardware" whenever referring to a prosthetic component.

Head injury

Do not change to injury of the head.

History means past events, making the phrase "past history" redundant.

CHANGE The patient had a past history of pain in the shoulder.

TO The patient had a history of pain in the shoulder.

Iliac crest

When anterior or posterior is used to describe the iliac crest, "aspect" or "part" is not needed.

Improvement

When an operation or treatment has been successful, the patient has relief of pain rather than improvement of pain.

Incidence/Prevalence

Incidence is the rate at which a certain event occurs *per a unit of time*. Incidence is used in statements indicating the rate per year or month, etc. Prevalence is the number of cases of a disease or disorder that are present in a population. Prevalence is used most often.

EXAMPLES

Symptomatic adjacent-segment disease occurred at a relatively constant incidence of 2.9% per year (range, 0.0% to 4.8% per year) during the ten years after the operation.

The prevalence of hemorrhagic complications was 5% to 32% in series ranging from twenty-eight to eighty patients who had a pulmonary embolism.

Do not use incidence to mean “instance” or “episode.”

Increase

(See Decrease/Increase)

Infection/Sepsis

Patients are infected, not septic. Implants, such as a prosthesis, can be surrounded by or affected by infection, but they cannot be infected as only living tissue can be infected. However, it is acceptable to use the term *periprosthetic joint infection* as the joint is infected, not the prosthesis that is in the joint. Sepsis is used only to refer to systemic or blood-borne infections. An infection is a local process.

Inferior

(See Direction, anatomical)

Interlocking nailing

Use of interlocking nail is acceptable and use of interlocking nailing is OK. Dynamic locking = proximal or distal screw fixation, or no screw fixation. Static locking = both proximal and distal screws are used. When the proximal or distal screw or screws is (are) removed, the nail is then unlocked (the fracture is converted to a dynamic construct, or to dynamic status). Note that the fracture, not the nail, is converted to a dynamic construct. Dynamization is OK as it refers to a process, but it is almost jargon. The nail is inserted in the bone and may or may not be locked to the bone by a screw or screws. A screw or screws may be inserted for additional stability, and then the screw is interlocked with the nail if the screw goes through the nail.

Insure

(See Assure)

The Journal of Bone and Joint Surgery

When a paper (usually an editorial) refers to JBJS, the company, use JBJS, Inc. (The company is also referred to as The Journal of Bone and Joint Surgery, Inc.) When referring to JBJS, the journal, in the text, use the following format: *The Journal of Bone & Joint Surgery*, as appropriate, when it is first mentioned. In later references to our journal in the text, use *The Journal*. It is also acceptable to use JBJS (no italics) and to alternate the forms within the paper.

Kill

When referring to laboratory animals, it is acceptable to use terms such as *sacrifice*, *ethanize*, or *kill*.

Lateral

(See Direction, anatomical)

Legg-Calvé-Perthes disease

Do not use the term “Perthes disease”; always change to Legg-Calvé-Perthes disease.

Less

(See Fewer)

Less than

(See Below, Under)

Long arm cast/ long leg cast

These terms are acceptable, but do not use hyphens.

Lower

(See Direction, anatomical)

Lower leg

This is an ambiguous term. Ask author if he means leg (distal to knee) or distal part of leg (ankle).

Male

(See Female)

Malignancy

This word refers to the quality or state of being malignant. Therefore, it cannot be physically found. Evidence of malignancy (a process), or a malignant tumor or growth may be found. If it is easy to change to *malignant tumor* or *malignant disease*, do so, but it is not necessary.

Man/Woman

The age of eighteen years is considered adulthood.

Maximum

Either maximum or maximal is acceptable as long as one or the other is used consistently throughout the text.

Medial

(See Direction, anatomical)

Mucous

This adjective often is misused for "mucus," the noun.

Multivariate

Do not use multivariant. Multivariable or multivariate is acceptable.

N (Nitrogen)

When beginning a compound, N is italicized.

Neonate

Birth to 4 wks; infant = 4 wks. to 14 or 24 months (authorities disagree); child = all ages less than 18 yrs. Adolescence ends when the growth plates close. It is usually not necessary to distinguish between a neonate and an infant, but if the terms are used, they should be used correctly.

Nerve root

Phrases such as first cervical nerve root should not be hyphenated at all.

Normal/Abnormal and Negative/Positive

Use these adjectives to describe the results, not the examination or the test.

CHANGE Blood studies were normal.
TO Results of blood studies were normal.

Cultures or tests for specific reactions can be negative or positive.

EXAMPLE

Cultures were negative for streptococci.
These adjectives can also describe a diagnostic image.

EXAMPLE

The anteroposterior radiograph was normal.

Operated

Use “involved” or “affected” instead of “operated” as an adjective.

CHANGE Six of the patients had venography performed on the operated limb only.
TO Six of the patients had venography performed on the involved limb only.

Osteotomized is acceptable.

Osteonecrosis

Use this term instead of “avascular necrosis” or “aseptic necrosis.”

Outcomes measures

p

When a lower case p is preceded and followed by a hyphen in the name of a compound, italicize.

Patellar tendon

Do not use patellar ligament. Change to patellar tendon.

Pathology

The meaning of this word is the study and description of disease processes, abnormalities, and lesions; therefore, do not use it to refer to the lesion or abnormality itself. Use abnormal change, disease, abnormality, tumor, or a similar noun.

CHANGE We found no pathology in the knee.
TO We found no abnormality in the knee.

However, it is acceptable to use the term pathology (sparingly) when referring to disease. It is no longer necessary to change to pathological process. If it is easy to change to “pathological condition” or “pathological involvement,” go ahead and change it.

Performed in

Operations, because they are invasive, are performed in, not “performed on”.

CHANGE Nailing was performed on two patients.
TO Nailing was performed in two patients.

Plate Fixation, Plating

If most situations, the use of the term “plate fixation” is preferable; however, “plating” is acceptable.

Plus

This word denotes a mathematical symbol. Do not use “plus” to indicate additional factors.

CHANGE The patient had a head injury plus a femoral fracture.
TO: The patient had a head injury as well as a femoral fracture.

Proved/proven

Either is acceptable.

Prevalence

(See incidence)

Proximal

(See Direction, anatomical)

Proximal-lateral, medial-lateral, etc.

Should be hyphenated.

Problematic

Do not use in the sense of "causing a problem." It means debatable.

Race

It is not necessary to change terms used for race. For example, Caucasian does not need to be changed to white.

Racial discrimination

(See Discriminatory language)

Rad

Do not use. Change to centigray.

Radiographs/Roentgenograms

Use one of these two words instead of "x-rays," "views," or "films." Either word is acceptable (use the author's preference), but be consistent within one manuscript. Occasionally, "view" can be used when changing it to "radiograph" would obscure meaning. If the author says that "two different views"—meaning anteroposterior and lateral—were used, changing it to "two different radiographs" would alter meaning.

Radiographs and roentgenograms are made, not "taken" or "obtained" (unless they are obtained from another physician or other source). Per Dr. Heckman, in keeping with the current magnetic resonance imaging literature, we should say that magnetic resonance images were "acquired" rather than "made." (However, we should still say that radiographs and computed tomography scans were "made.")

It is fine to use the term "plain radiographs," but do NOT use "plane radiographs."

Change "radiographic nonunion," "radiographic shortening," etc. to "radiographic evidence of" or "radiographic findings of," or similar rewrites.

Range

Use "ranged" instead of "varied" when referring to any group of values with a known minimum and maximum.

Relief

(See Improvement)

Revisional

Do not use. Change to revision.

Right

(See Direction, anatomical)

Sacrifice

(See Kill)

Saline

Salt in water is a saline solution.

CHANGE The wound was irrigated with saline.

TO The wound was irrigated with saline solution.

Scintigraph

Do not use. Use scintiscan instead. Scintigraphy is OK.

Septic

(See Infected/Sepsis)

Short arm/ short leg cast

These terms are acceptable, but do not use hyphens.

Significant

Use significant only to describe something that has been statistically calculated. Alternative words for significant in the general sense are considerable, substantial, appreciable, important, severe, distinctive, major, or notable. If uncertain whether significant is used in the statistical sense, query the author.

An author must supply a p value if he or she uses the term “significant” in the Results section, i.e., p values must be provided for significant results from his or her own study. However, if p values are supplied in the Results, then it is not necessary to include p values in the Abstract or Discussion sections. P values are not necessary when “significant” is used to refer to results from another study (such as in the Discussion or introduction of scientific papers or in Current Concepts or Orthopaedic Forums); however, we must ask if the term is being used in the statistical sense (and, if not, to change it to another term such as “substantial.”).

In an occasional paper, the author uses 95% confidence intervals to indicate significance, and p values are not necessary when the author states that a result is significant. (For example, if the estimated difference between groups A and B is 5 and the 95% CI for the difference is 4 to 6, the groups are significantly different because a difference of 0 does not fall inside the confidence interval.)

If an author makes a sweeping statement, based on the findings in his or her study, (“Operation A” is not significantly better than “Operation B”), we need to include the statement “with the numbers available” because a larger group might demonstrate a significant difference. If he is stating that the specific groups in the study (one that had “Operation A” and one that had “Operation B”) had no significant differences, it is not necessary to add the caveat. If the author included the statement, it is not necessary to delete it.

If an author provides a p value such as $p = 0.000$, add this query: “A p value must have a numeric value. Please determine the maximum number of decimal characters that your statistical package reports and present “p” as being less than that value (e.g., if the package reports anything less than 0.0001 as 0.000, change this to $p < 0.0001$).”

It is acceptable to use “statistically significant”; however, do not add “statistically” if the author did not use it.

If an author states a comparison was not significant, it is not necessary to ask for a p value.

Silastic

Do not use. Substitute silicone or silicone rubber.

Six degrees of freedom

Do not use “6° of freedom.”

Spinal injury

This refers to spinal cord injury. It is not to be used synonymously with fracture. A spinal fracture is an injury to the vertebra, a spinal injury is a spinal cord injury, a ligament injury is a ligament injury.

Suffer

Do not describe a patient as suffering from a particular disease or injury.

CHANGE One other patient suffered an anaphylactic reaction.

TO One other patient had an anaphylactic reaction.

CHANGE Three patients had suffered a fracture.

TO Three patients had sustained a fracture.

Sulphur/sulfur

Either spelling is ok, but use should be consistent within an article.

Superior

(See Direction, anatomical)

Synovium

The term “synovium” is synonymous with “synovial membrane” but is not synonymous with “synovial fluid.” Thus, use “synovium” when referring to membrane and “synovial fluid” when referring to the fluid. If meaning is not clear, query author. (The term “flexor tenosynovium” is correct.)

Tell

Only a person can tell or “say.” A report details, documents, or describes.

Temperature

We all have a temperature; patients who are sick sometimes have a high temperature or a fever, or are febrile.

Tensor fasciae latae

Use instead of tensor fascia lata.

Tibial nerve

When an author has used the term “posterior tibial nerve,” delete “posterior” as there is no such thing as a posterior tibial nerve.

Toxic, Toxicity

The word toxic means poisonous or else pertaining to or caused by a poison or toxin. Toxicity is the quality, state, or degree of being poisonous. Do not use these words to describe a patient.

CHANGE The patient became toxic from the drug.

TO There was a toxic level of drug in the patient.

Track/tract

Use track for anything artificial (e.g., hardware [nails, pins, etc.]). Use tract for anything anatomical (e.g., urinary tract, spinal tract).

Transfuse

Blood, not the "patient," is transfused.

CHANGE We transfused the patient with three units of packed red blood cells.

TO For this patient, we transfused three units of packed red blood cells.

Under

(See Below, Under)

Univariate

Do not use univariant.

Unreamed nailing

Use instead of "unreamed nail." "A nail without reaming" may also be used.

Upper

(See Direction, anatomical)

Varying, Various

The word "varying" means that which is changing or causing to change. "Various" means of different kinds or aspects.

CHANGE We tried varying methods...

TO We tried various methods...

Verbal phrases

It is acceptable to use a comma to replace a verbal phrase in a series.

EXAMPLE

Severe degeneration was seen in ten knees; moderate degeneration, in seventeen knees; mild degeneration, in five knees; and slight degeneration, in two knees.

However, repeat the verbal phrase when the sentence is complex or there is a great deal of information for each item in the series.

EXAMPLE

An excellent result indicates no limitation of motion, clicking, noise, or pain; a good result indicates

occasional slight pain, but no other symptoms, associated with motion; a fair result indicates slight pain,

clicking, or noise with motion as well as limitation of motion; and a poor result indicates pain at rest as well as

with motion, and limitation of motion.

Walk

(See Ambulate)

Web-site addresses

Refer to the term as "web site" in text (no capitals).

Where

This word really signifies place. It is not the exact equivalent of "in which" or "when."

CHANGE Where the patient is not cooperative, it is best to use a cast.

TO When the patient is not cooperative, it is best to use a cast.

It may be used when defining values in equations.

EXAMPLE

In the equation $x + y$, where $x = 40$ and $y = 60$, ...

Which, That (Restrictive and Non-Restrictive Clauses)

A restrictive clause contains information that is necessary to understand the main idea; it restricts the meaning.

Use "that" to introduce these clauses. Do not set the clause off with commas.

EXAMPLE

Respiratory complications that did not meet the criteria were recorded.

A nonrestrictive clause provides additional information that is not necessary for complete understanding. You can remove the clause and not change the meaning of the sentence.

Use "which" to introduce these clauses. Set off the clause with commas.

EXAMPLE

This hematoma, which becomes isolated from circulation, may protect an inoculum from antibiotics.

Sometimes it is difficult to determine whether the clause is restrictive or nonrestrictive, particularly when commas are misused.

EXAMPLE

The radiographs which were made before amputation demonstrated ...

Is the author referring to some or all of the radiographs?

If only some of the radiographs were made before amputation, use "that" and no commas.

EXAMPLE

The radiographs that were made before amputation demonstrated ...

If all of the radiographs were made before amputation, use "which" and set off the clause with commas.

EXAMPLE

The radiographs, which were made before amputation, demonstrated ...

While

In the sense of "although" or "whereas," "while" is grammatically correct. However, try to keep the use of "while" in these contexts to a minimum so that the word can be specific for "at the same time as." Do not use while as a synonym for "and."

CHANGE The orthopaedist examined the foot while the assistant fitted the shoe.

TO The orthopaedist examined the foot, and the assistant fitted the shoe.

Workers' Compensation

The federal insurance company for employees has changed its name to one of neutral gender. Note the plural possessive form.

Would

Avoid this word; it is indefinite. A phrase such as "I would recommend" requires an if clause to be correct. The author recommends or does not recommend.

X and Y Axes

Whenever a figure includes x and y axes, the y axis does not need to include "0" unless the copy editor believes it would be misleading without it. If it needs to be added, the author (or DTP) should be asked to do so by extending the y axis and inserting a break in the line to indicate the missing values. This applies to all figures that have a y axis, not just to Kaplan-Meier curves.

X-rays
See radiographs.