

Basic Mistakes Seen in Abstracts and Reports Written in English by Japanese Anesthesiologists

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Purpose

Imperfect understanding of English can cause many problems; and when nonnative users write in English, the mistakes that occur are numerous. However, the majority of these can be broken down into a few categories. Thus the authors purposed to study medical writings and to categorize the errors for ease of correction.

Methods and Materials

For this report, abstracts and papers written in English by Japanese anesthesiologists were studied. In 14 abstracts (ASA Meeting Proceedings, Anesthesiology 61:3A;A39, A79, A89, A332, A514 and 63:3A;A17, A56, A107, A196, A223, A294, A357, A378, A559) and two papers ready for submission, written by those (hereafter, A) who have been in the United States of America for more than two years and have published their works more than two times in the journal *Anesthesiology*, the English errors were divided into two broad areas: (1) those of punctuation and (2) those of grammar. These errors were then corrected using the rules of English that applied.

Results

1. Punctuation

Punctuation errors fell into three categories, in increasing order of frequency: (1) a lack of hyphens where necessary, (2) a lack of commas where necessary, and (3) a misuse of colons.

1) Leaving a hyphen out of a compound is a minor offense, but is nonetheless common and sometimes confusing. In these abstracts and papers such phrases as 'self-evident', 'set-up', 'longer-acting', 'wash-out', 'end-tidal', 't-test', and 'time-sequent' characteristically appeared without hyphens. Whenever a compound is used as an adjective, it must have a hyphen between the words. Also, 'set-up' and 'wash-out' are compound verbs being used as nouns, and 't-test' is a compound noun which always requires a hyphen.

2) A lack of commas is a more serious problem, as these break the sentence down into its segments of meaning. In abstract A17, for example, this sentence was seen: "40 mongrel dogs were anesthetized and intubated with one of the three anesthetics, Sevo, Halo and Isof without any other drugs". The best recourse is to put a comma after 'Isof', and thus enclose the three names in a subunit. Another common error was the lack of a comma after the initial words, 'however', 'therefore', 'furthermore', and 'eventually'.

3) The colon is commonly used to show that a list will follow. The list is explained with a full sentence before the colon. Therefore, in the following sentence, the

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words 'were taken' must be placed before the colon: "From the records, these sets of parameters: Heart rates, arterial blood pressure, mean arterial pressure and arterial pulse pressure were taken". Also, the first word after a colon should not be capitalized unless it begins a quote.

2. Grammar

Grammatical errors were more varied, but were often those of redundancy and verbosity, which even native English speakers fall victim to. These will not be discussed here. Of the remaining problems encountered, six categories were most common: (1) listings without parallel structure, (2) misaligned sentences, (3) misused words or phrases, (4) incorrect tenses, (5) plurality problems and (6) article problems. These are listed in order of increasing frequency.

1) Parallel structure is achieved when all the phrases in a list use the same parts of speech. Among abstracts and papers which lacked this structure was one by A, who wrote, "...Physical maneuvers such as producing high intrathoracic pressure, moderate changes in blood pressure or swallowing...". Here are three items in a list. One is a verb (producing), one is a noun phrase (blood pressure), and one can be either a verb or a noun (swallowing). The introductory word (maneuvers) is a noun, so logically the word 'producing' should be replaced with 'production of', thus presenting nouns for each item listed.

2) Many sentences had words in the wrong order, resulting in confusion. Usually one word was misplaced, as in A559, "Consenting six healthy male volunteers...were studied...", where 'six' and 'consenting' are reversed. The rule here is that the amount or number of a noun always comes first among its descriptive adjectives. Note this sentence by A: "...The authors studied CO₂-ventilatory response curves and the changes in heart rate (HR) and blood pressure (AP) to rebreathing of exhaled gas...". This sentence does not make sense unless a prepositional phrase is added, as in this possible revision: "...The

authors studied CO₂-ventilatory response curves and the changes in heart rate (HR) and blood pressure (AP) in response to rebreathing of exhaled gas...". Now the sentence has proper syntax: the changes are in response to rebreathing of exhaled gas.

3) Misunderstood words and phrases were more numerous, and no one rule applies to them all. One exemplary case was observed in A17, "15 mongrel dogs were anesthetized with every three inhalational anesthetics...". As only three anesthetics were discussed, 'every' should be changed to 'all' or 'one of'. In A357, the word 'additive' appears to have been used as an adverb, making the resulting sentence incomprehensible: "In this case, two compounds seemed to be acting additive". Here, 'additive' should be changed to 'as additives' in order to make a logical sentence.

4) Changes in verb tense also occurred often. A17, for example, shifted from past to present tense, then back to past tense throughout the course of the report. The following sentence from A196 requires correction: "The 21 cm multihole injectate port was placed 1-2 cm proximal to the tricuspid valve to obtained optimum mixing of injectate". This is a simple mistake. To obtain the proper infinitive verb, the '-ed' must be removed from 'obtained'. Authors should always review their papers for uniform verb tense.

5) The lack of plurality in the Japanese language causes a particular problem when Japanese write in English. Examples such as A294, "These relaxation were not inhibited..." and the paper by A, "...Concentration of local anesthetics used are great enough..." were ubiquitous. The former could be corrected by common sense; we write 'this relaxation', 'these relaxations'. The latter example requires 'concentration' (the subject of the sentence) and the verb to agree. Therefore, 'concentration is' or 'concentrations are' would be proper.

6) Articles are a problem for the same reason that plurality is a problem, namely

that they don't exist in Japanese. But they are important in English, as they separate a specific item from a general item. In the paper by A we find, "...The important effector organ, heart, modifies...". Here 'heart' is a specific organ, as described by the phrase, 'the important effector organ', and therefore should be 'the heart'. In contrast, then, is this phrase from A559, "ventilatory loads against the spontaneous breathing...", where 'the' is unnecessary because the loads are against any spontaneous breathing, and 'the' is the specific article. Also common is confusion between 'a' and 'an', in that 'an' is used when the following word begins with a vowel. Thus, in A17, "Table 2 is a induction time..." is incorrect.

Conclusion

In writing these abstracts and reports, the authors committed several types of

English errors which, while varied, could be divided up, analyzed, corrected and clarified. It should be noted that while the mistakes were often basic, they were rarely serious enough to render the sentences meaningless. However, careful review of such writings by Japanese anesthesiologists and other Japanese scientists would help the English therein to function properly. Good rules to follow are: (1) use short sentences, (2) keep subjects foremost in sentences, and (3) be especially careful with lists, tenses, plural nouns and articles.

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