Scientific Writing

For the Graduate Students of

Seoul National University, School of Pharmacy

June2, 9, 2021

English is the most important medium of communication for experts of any field, especially in science. The method of scientific writing, known as IMRD, has its tradition of 300 years, established with the first scientific journal published in 1665, and English used for that purpose is quite different from English used as novelists or poets. Learning how to communicate science in English is therefore essential for students of science since only the correct use of syntax and tense will a scientific report precisely and clearly provide ideas to the scientific community.

During the first session (June2), we will discuss the IMRAD scientific writing format and review essential English rules, along with frequent mistakes Korean students commit when writing English. These mistakes often occur because the grammar of one language reflects a way of thinking that is different from others.

For the second session (June 9), we will have a writing workshop, in which sample sentences and journal abstracts are used to show how scientific writing is properly done. The following are some of the examples:

Task 1: **Can you find any grammatical errors?**

1. Verbs has to agree with their subject

2. Just between you and I, case is important

3. A preposition is a poor word to end a sentence with.

4. Don’t use no double negatives.

5. Remember to never split an infinitive

6. Join clauses good, like a conjunction should

7. About sentence fragment

Task 2: **A Sample Abstract** (edited version)

Introduction: Stapes surgery has been reported to improve hearing for stapedial fixation. This study was aimed to review the surgical findings and hearing results of stapes surgeries for 20 ears with stapedial fixation.

Methods: We reviewed medical records and video recordings of 20 consecutive stapes surgeries between 2011 and 2014. Patient ages ranged from 20 to 64 years, ~~with~~ 5 males and 12 females.

(The) Mean audiologic follow-up duration was 11 months. [Hearing improvements at the final pure-tone audiometry were determined as successful when air-bone gap (ABG) was reduced to 20 dB or less, and as excellent when ABG was reduced to 10 dB or less. Surgery-related deterioration of bone-conduction (BC) was defined (determined) as positive when the difference between (the) final and preoperative BC was more than 15 dB, and over-closure (was determined ) as positive when (the )final air-conduction (AC) was better than (the) preoperative BC.

Results: Pre-operative four-frequency BC and AC thresholds were 39.8±15.8 and 66.4±15.3 dB HL, respectively, and ABG were(was) 26.6±10.2 dB. After the stapes surgery, the thresholds for BC and AC ~~thresholds~~ were 36.8±16.3 and 42.0±16.2 dB HL, respectively~~,~~ ~~while~~ (whereas) ABG was 5.2±6.5 dB at the last follow-up. After surgery, (the threshold for) BC t~~hreshold~~ was significantly improved at 2 kHz ~~while~~ (whereas) (that) for AC ~~threshold~~ improved at all frequencies.

Results: Excellent hearing improvement~~s~~ ~~were~~(was) accomplished in 16 ears (80%) and successful improvement~~s~~ in all ears (100%). Over-closure was observed in 7 ears (35%). There were no patient(s) with surgery-related sensorineural hearing loss.

Conclusion: Stapes surgery is effective for ~~hearing improvement~~ (for improving hearing) for stapedial fixation. ~~Operators~~ (physicians) should be able to cope with various situations during or after the stapes surgery.