

Scientific Writing  
For the Graduate Students of  
Seoul National University, School of Pharmacy  
May25, June 8, 2022

English is the most important medium of communication for the experts of any field, especially for those of science because it is the universal language for the scientific community. The method of scientific writing, known as IMRD, has a tradition of 300 years, established with the first scientific journal published in 1665, and English used for that purpose is quite different from English for writing novels or poems. Learning how to write and present research data in the IMRD format and to communicate effectively in English is therefore essential for students of pharmacy as well as any other fields of science.

The first day of seminar (May25) will consist of two sections. In the first session, we will discuss about the basics of composing sentences and paragraphs in English writing, and discuss frequent mistakes. The second session will deal with writing scientific text, and presenting research data using the IMRAD format.

On the second day (June 8), we will review the scientific writing format and have a writing workshop. Sample sentences and paragraphs from journal abstracts and research papers to illustrate good scientific writing. The following are some of the examples that will be used in the seminar.

**Task 1 (5월25일) : Can you find the 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(6월 8일) : 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  $39.8 \pm 15.8$  and  $66.4 \pm 15.3$  dB HL, respectively, and ABG were (was)  $26.6 \pm 10.2$  dB. After the stapes surgery, the thresholds for BC and AC thresholds were  $36.8 \pm 16.3$  and  $42.0 \pm 16.2$  dB HL, respectively, while (whereas) ABG was  $5.2 \pm 6.5$  dB at the last follow-up. After surgery, (the threshold for) BC threshold was significantly improved at 2 kHz while (whereas) (that) for AC threshold improved at all frequencies.

**Results:** Excellent hearing improvements were (was) accomplished in 16 ears (80%) and successful improvements 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.