

Cotton Bud and Ear Cleaning - A Loose Tip Cotton Bud?

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Summary

Complications that arise from self-cleaning the external ear canal are common. This is a prospective study using standard questionnaire on the practice of ear cleaning in 50 subjects. A loose tip cotton bud was also shown to them to assess if it was acceptable to replace their current cotton bud. Thirty six percent of them clean their ears by introducing an object into the ear canal once or more a day. The commonest reason to clean the ears was the presence of earwax. Only 6% used a cotton bud to mop fluid from the ear canal. Almost all (92%) the subjects used a cotton bud to clean the ear. A complication rate of 2% was noted. A loose tip cotton swab was shown to the subjects. Despite explaining that it is safer and better, only 24% of the subject were willing to change to this loose tip cotton bud. Seventy four percent of the subjects cleaned their ear regularly because of earwax. The misconception of needing to clean the ear canal by introducing an object into the ear is rampant. This practice should be avoided and health care providers can play an important role in this.

Key Words: Cotton bud, External ear canal, Cleaning

Introduction

Cleaning the ears with a cotton bud is a common practice and occasionally traumatises the ear canal¹. This will sometimes lead to otitis externa. The cotton bud introduces bacterial and fungal element into the ear canal and if the epithelium is traumatised, infection will easily set in. Besides that, the cotton bud also acts as a ramp to push in the wax deep into the external ear canal. Over time, this accumulates and causes impacted earwax.

However, there are times where we would want to mop any water that has accidentally entered the ear. It has been recommended that a cotton bud used should have a loose tip that does not traumatize the ear canal². It is only used to mop out water or discharge in the ear canal and, not for removing earwax or scratching the itchy ear canal. Ear wax are only produced in the outer

part of the ear canal. The epithelium of the external canal has a special character where the epithelium grows outwardly towards the pinna with the wax. The earwax then falls off.

In this study, we want to assess how frequent an instrument is being used to clean the ears and what are the common objects used. We would like to study the reason behind this habit. The complication rates were documented and a loose tip cotton bud was introduced. We want to assess if the ear-cleaners would use this loose tip cotton bud instead of a conventional cotton bud.

Materials and Materials

This is a prospective survey using a standard questionnaire. The samples were selected randomly

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from patients who attended out patient clinic in Hospital Kuala Lumpur. These patients were not having ENT problems. Subjects over the age of 15 were included into the study. Patients with active ear disease were excluded. A sample of a loose tip cotton bud was shown to them during the interview.

Results

Demographic data

Their ages ranged from 15 to 74 old with a mean of 40.7 years. The demographic data of the subjects were represented in Figure I.

There were 25 male and 25 female subjects. There were 30 Malay subjects, 7 Chinese subjects and 13 Indian subjects.

Frequency of cleaning the ear canal

Eighteen subjects (36%) clean their ears everyday, most of them more than once a day. Twenty-seven subjects (54%) cleaned their ear canal once or more in a week, and 5 subjects (10%) cleaned their ears once or more a month.

Table I: Frequency of cleaning the ears

Numbers of times per day	Percentage of subject
1	16
2	12
3	6
4	2
Numbers of times per week	
1	18
2	16
3	20
Numbers of times per month	
1	4
2	4
3	2

Mode of cleaning

The majority of the subjects used cotton bud to clean their ears. Other objects used were metal probe, towel and finger.

Reason for cleaning

Earwax was noted to be the most common reason to clean the ears. Other reasons include water in the ear, itchy ears and dirty sensation.

The respondents were asked if they could remember any complication that has arisen from cleaning the ears. Only one subject reported an episode of otitis externa. After showing them the loose tip cotton bud, only 12 (24%) subjects agreed to replace their cotton bud with it.

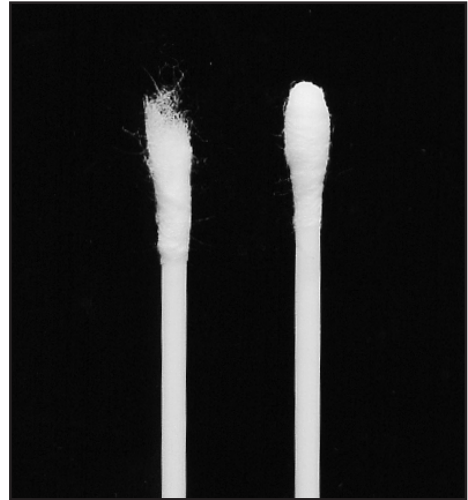


Fig 1: Photograph showing a loose tip cotton bud and a tight cotton bud

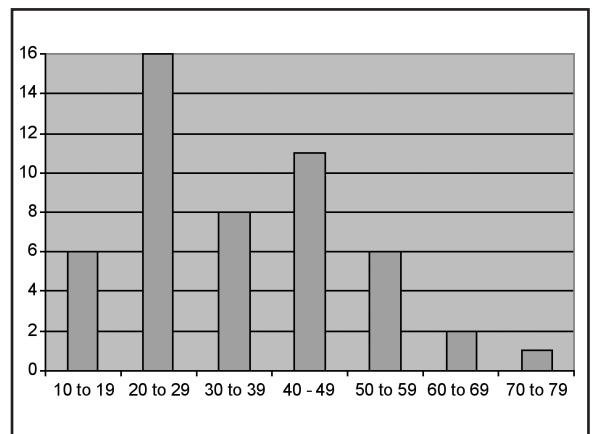


Fig 2: The age distribution of the subjects

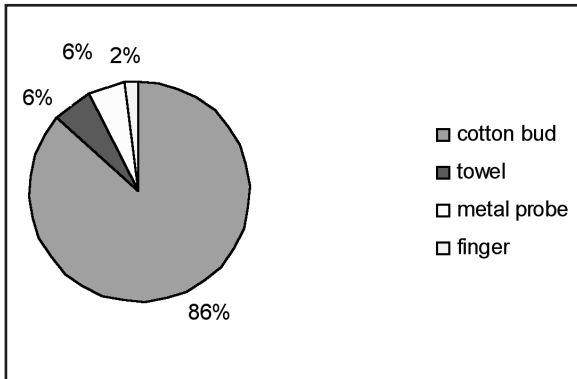


Fig 3: Distribution of the objects used to clean the ear

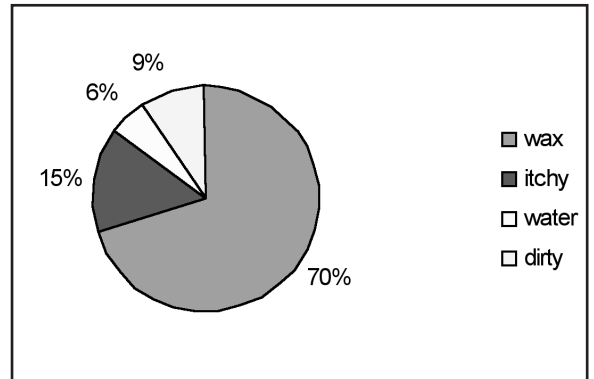


Fig 4: Distribution of the reasons for cleaning the ears

Discussion

Cotton bud induced injury is common and preventable¹. The study has shown that cotton bud usage to clean the ear canal is extremely common in Kuala Lumpur. Over years of this unhealthy practice, complication may arise. This small study of 50 subjects revealed a rough estimate of 2% complication. Considering the population and if it is done frequently, a substantial amount of external ear problems may arise. Some of these complications will include otomycosis, laceration in the ear canal, perforated tympanic membrane, otitis externa and impacted wax. These diseases are common among patients in ENT clinics.

In this study, cotton bud is the most common object used to clean the ear canal (92%); other objects such as towel were seldom used. A small percentage also use metal probe to clean the ear canal. Metal probe designed specifically to remove earwax were commonly sold in our markets and pharmacies in Kuala Lumpur.

In this study we found that the subjects cleaned their ear canal very often. It has become a regular activity just like bathing and brushing teeth. We tried to find out why these subjects want to clean the ear canal so often. Seventy four percent of them believed that it is to remove earwax from the ear canal. We feel that the public needs to be informed that there is a natural mechanism where earwax is removed from the ear

canal. Only when fluid has accidentally entered into the ear canal, we need to clean it. This should be performed using a loose tip cotton bud to prevent injury to the ear canal. Only 6% of the subjects used a cotton bud to remove water from the ear canal. Most of the subjects were adults, and this practice will continue as they teach the children to do this. It should be emphasized in school that earwax should not be removed with cotton buds. The earwax will fall out naturally. Occasionally, this can be facilitated with ear drops such as olive oil or earwax softener.

Sixteen percent of the subjects used a cotton bud to scratch the ear canal when it is itchy. This is dangerous, as it will easily traumatize the ear canal. Medical opinion should be sought if ear itchiness persists, as this may be a symptom of otomycosis or eczema.

The response to loose tip cotton bud was poor. Only 24% agreed to change their cotton bud to a loose tip one after showing them a sample, despite being told that it is safer and better.

Conclusion

Cotton bud is a very common object used to clean the ear canal in Kuala Lumpur. Thirty six percent of the subjects cleaned their ear canals once or more everyday. The most common reason to clean the ear canal was to remove earwax from the ear canal. Only

6% of the subjects used it to absorb water or fluid from the ear canal. The majority of the public believes that earwax needs to be removed from the ear canal using a cotton bud. A loose tip cotton bud was not well accepted by the respondents to absorb water from the ear canal. The public needs to be informed that cotton bud is not an appropriate object to remove earwax from the ear canal.

Questionnaire

- Subject identification number
- Race/Age/Sex
- Do you use an object to clean your ear?
- How frequent do you clean your ears?
- How / What do you use to clean your ears?
- What is the main reason you clean your ears?
- Do you recall any incidence when you had a complication from cleaning your ears?
- This is a sample of a safer and better cotton bud to absorb fluid out from the ear canal. Would you consider changing your cotton bud to this type?

References

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