



ENT·Education·Gambia  
"Education through Innovation"

# Otalgia

There are just three basic facts that you need to know about Otalgia.

1. It is either due to ear disease or it is referred
2. The sensory supply to the skin and mucosa of the ear
3. Structures in the head and neck that begin with 'T' - mostly

## 1. Ear disease or not ear disease

Almost all inflammatory or infective conditions of the pinna, outer ear canal, ear drum and middle ear can cause pain. Trauma does as well as can carcinoma of the pinna and middle ear (very rare). Common examples are otitis externa and otitis media.

However, it must be remembered that pain may be referred to the ear from another source. This is referred or non-otogenic pain. If a patient complains of otalgia and has a normal looking ear then a search must begin with all the sites that are known to refer pain to the ear - see section 3 (all the 'T's).

## 2. The sensory supply to the skin and mucosa of the ear

There are many nerves that give sensation to the outer and middle ear. You should know them all.

- |    |         |                      |
|----|---------|----------------------|
| a. | CN V    | The Trigeminal       |
| b. | CN VII  | The facial           |
| c. | CN IX   | The glossopharyngeal |
| d. | CN X    | The Vagus            |
| e. | C2 & C3 | Cervical roots 2 & 3 |

## 3. Causes of referred otalgia - structures beginning with 'T'

- |          |                                |
|----------|--------------------------------|
| Tonsil   | Tonsillitis, tonsil carcinoma  |
| Tongue   | Tongue carcinoma               |
| Teeth    | Tooth abscess                  |
| TMJ      | TMJ dysfunction                |
| Throat   | Carcinomas in larynx & pharynx |
| The neck | Arthritis                      |