

CHRONIC SUPPURATIVE OTITIS MEDIA AND COMPLICATIONS IN PATIENTS PRESENTING AT THE ENT CLINIC, U.C.H.

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INTRODUCTION.

Otitis media is the inflammation of the mucoperiosteal lining of the middle ear cleft. Chronic otitis media may follow/ result from inadequately treated acute otitis media. Other predisposing factors include: socio-economic status, poverty, overcrowding, malnutrition, anaemia, recurrent upper respiratory tract infections, mechanical obstruction in the nasal cavities and allergy.

Otitis media continues to be one of the most common conditions seen in ORL practice. Complications arise when infection spreads from the middle ear cleft to structures which it is normally separated from by bone. In the developed world, it is generally believed that the incidence of complications of C.S.O.M has decreased significantly with antibiotic treatment but the mortality from intracranial complications is still high.

In our country, the incidence of the complications is not known; it is likely to be very high. This is particularly true because of poverty, ignorance, preference for traditional remedies and religious beliefs.

We present here the complications of C.S.O.M as seen in patients presenting at the E.N.T clinic, U.C.H; Ibadan.

Patients and methods

This is a retrospective study of patients with a clinical diagnosis of chronic suppurative Otitis media (C.S.O.M) seen at the E.N.T clinic only from June 1996 to March 2000.

The available clinical files were retrieved and necessary information extracted included age, sex and type of complication.

Results

A total of 535 cases of C.S.O.M were recorded in the E.N.T Clinic, U.C.H, Ibadan, attendance Register from June 1996 to March 2000. Only the clinical files of 383 (71.6%) were available for study. Eighteen (4.7%) had complications. (Table 1)

Age and Sex

The age range of the patients was from 3 months to 90 years with a mean age of 19.7 ± 1.0 yrs. The peak age group was the 1st decade with 40.7% of the patients while majority (78.9%) were in the first to third decades of life.

Table 1

Age Group	Males	Females	Total
0-10	90	66	156 (40.74%)
11-20	35	34	69 (18.02%)
21-30	49	28	77 (20.10%)
31-40	27	13	40 (10.44%)
41-50	9	8	17 (4.44%)
51-60	5	4	9 (2.35%)
61-70	3	8	11 (2.87%)
71-80	1	1	2 (0.52%)
81-90	-	2	2 (0.52%)
Total	219	164	383

There were 219 (57.2%) males and 164 (42.8%) females (M:F = 1.3:1)

Presenting Symptoms

All the patients had otorrhoea (ear discharge) as the main presenting symptom for more than six weeks. Some had impaired hearing also.

Complications

Eighteen patients (4.7%) had complications as shown in table 2.

Table 2

Complications.	Number of Patients
Meningitis	1
Labryrinitis	1
Facial nerve Paralysis	4
Acute Mastoiditis	2
Tympanocutaneous Fistula	2
Dermatitis of the external ear	4
Meatal stenosis	2
Squamous cell carcinoma	2
TOTAL	18

Frequency distribution of Complications of C.S.O.M

Discussion

Chronic suppurative otitis media (C.S.O.M) is a chronic inflammation of the mucoperiosteal lining of the middle ear cleft. It usually follows a poorly/inadequately treated acute otitis media.

Though otitis media is seen in all age groups, it is most prevalent in infants and children¹. The true incidence of C.S.O.M in the tropics is not known, whereas in the developed world about 40-60% of children would have had an attack of acute otitis media by their first birthday².

This present study further confirms the above view with a peak in the first decade of life 156 (40.7%).

In this environment, C.S.O.M appears to be on the increase and no age group is exempted. The reasons for this may not be far-fetched considering the level of poverty in the country.

Poverty goes with low socio-economic status which is associated with overcrowding, poor nutritional status, anaemia and prevalent upper respiratory tract infection. Over 75% of our patients belong to this group.

Also ignorance, preference for traditional remedies and religious belief add to this unfortunate situation. The above factors to a large extent contribute to late presentation of patients to experts in this area as well as development of complications. A complication rate of 4.7% was found in this study. This could have been higher if (a) all the clinical files were available for

analysis (b) those that came through the A & E department as well as those that presented directly to the neurosurgeons and physicians were studied. This is a clinic based study. There must have been those that died at home, that could not be accounted for. The complications seen in this study are in table 2. Facial nerve paralysis and dermatitis of the external ear were each seen in 4 patients; while meningitis and labyrinthitis were the lowest, seen in 1 patient each.

Meningitis is a major and serious complication of C.S.O.M and probably the commonest intracranial complication. In the past, patients with this complication almost died, but the introduction of effective antibiotics has altered this.

Generally speaking complications of Otitis media can be classified into:

- (a) Intracranial and
- (b) Extracranial. (See Table 3)

At any time, the complications may be clinically dominant with other emerging from investigative findings. The principles of treatment, for all complications include:⁴

- (a) systemic antibiotic therapy
- (b) local neurosurgical attention to the complication(s) identified
- (c) treatment of the C.S.O.M.

This is what we practise here. We are fortunate to have an efficient neurosurgical unit, a functional CT-scan suite, as well as a radiotherapy unit.

A multidisciplinary approach is used in the management of those patients who reach this hospital, with a good outcome. This is in contrast to what obtains in most hospitals in the developing world.

In conclusion, C.S.O.M is still very much with us. The prevalence may be reduced by improving the socio-economic status of the populace; provision of adequate and better health facilities, health education, and continued medical education to enable clinicians recognise these symptoms early and effect prompt referral to specialists.

Table 3

a. Intracranial

- Subdural abscess
- Extradural abscess
- Meningitis
- Encephalitis
- Brain Abscess.
- Lateral sinus thrombophlebitis
- Otitic hydrocephalus.

b. Extracranial

Intratemporal

- Facial Nerve Paralysis
- Labyrinthitis
- Apical petrositis
- Gradenigo Syndrome

Extratemporal

- Facial Nerve Paralysis
- Subperiosteal mastoid abscess
- Tympanocutaneous fistula.
- Otitis tetanus
- Citelli's abscess
- Bezold's abscess
- Luc's abscess. etc

Classification of complications of Otitis media

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