

## Case Report: Otitis Media Supuratif Kronik Auricula Dekstra Type Benigna

Fransiskus Harf Poluan<sup>1\*</sup>, Erica G. M. Simanjuntak<sup>2</sup>, Juan Alessandro J. M. N. Lele<sup>3</sup>

<sup>1,3</sup> Faculty of Medicine, Universitas Kristen Indonesia, Jakarta, Indonesia

<sup>2</sup> General Hospital Universitas Kristen Indonesia, Jakarta, Indonesia

\*Corresponding Author:

Email: [fransiskus.poluan@uki.ac.id](mailto:fransiskus.poluan@uki.ac.id)

---

### Abstract.

*The present case report describes the clinical features, diagnostic findings, and management of a 61-year-old female patient diagnosed with Chronic Suppurative Otitis Media (CSOM) of the right ear, benign type. CSOM is a persistent inflammation of the middle ear characterized by continuous or recurrent ear discharge through a tympanic membrane perforation lasting more than two weeks. The patient presented with right ear discharge for approximately four months, initially serous and later purulent with occasional blood, accompanied by ear pain, fullness, tinnitus, and mild dizziness. Physical examination revealed a central perforation of the tympanic membrane with mucopurulent discharge, supporting the diagnosis of benign-type CSOM. Treatment consisted of aural toilet and systemic antibiotic therapy using levofloxacin 500 mg twice daily combined with cetirizine 10 mg once daily for one week, alongside education to maintain ear hygiene and avoid water exposure. Clinical improvement was observed with resolution of otorrhea and no further complications. Prognosis was good (ad vitam bonam), while functional and curative outcomes were moderately favorable (dubia ad bonam). This report emphasizes the importance of early diagnosis, adequate antimicrobial therapy, and patient compliance in achieving a dry and safe ear condition while preventing recurrence or long-term hearing impairment in CSOM.*

**Keywords:** *Bivalvia; bray-curtis; canonical correspondence analysis;; density and gastropoda.*

---

## I. INTRODUCTION

Chronic suppurative otitis media (CSOM) is a persistent inflammation of the middle ear or mastoid cavity characterized by recurrent or continuous ear discharge (otorrhea) lasting for 2 to 6 weeks through a perforated tympanic membrane [1]. CSOM is classified into two types: benign and malignant. In the benign type, the inflammatory process is confined to the mucosa, rarely involves bone destruction, and the perforation is central in location. In contrast, the malignant type usually presents with marginal or attic perforation and may be associated with cholesteatoma [2]. Globally, CSOM affects approximately 65–330 million people, predominantly in developing countries, with an estimated 39–200 million (60%) suffering from significant hearing impairment. Annually, around 31 million new cases are reported, and 22.6% occur in children under five years of age [3] [4]. The prevalence of CSOM is considerably higher in developing nations, reaching 11%, compared to only about 2% in developed countries. This disparity is influenced by multiple factors, including high poverty rates, limited health awareness, and restricted access to healthcare services. According to Indonesia's national survey on hearing and vision health, the prevalence of CSOM ranges between 3.0–5.2%, equivalent to approximately 6.6 million Indonesians [5] [4]. The most common etiological agents of CSOM are bacteria, particularly *Pseudomonas aeruginosa* (22–44%) and *Staphylococcus aureus* (17–37%) [6].

Clinically, CSOM presents with purulent or mucoid otorrhea, hearing loss, otalgia, tinnitus, aural fullness, and occasionally vertigo. A thorough anamnesis and otoscopic examination are crucial for diagnosis. Audiological assessments, such as pure tone audiometry and tympanometry, help determine the degree of hearing impairment, while nasopharyngoscopy is useful for evaluating potential Eustachian tube dysfunction. Temporal bone CT scanning can further identify the presence or absence of cholesteatoma [7]. According to the World Health Organization (WHO), the management of CSOM focuses on eradicating infection and cholesteatoma while repairing tympanic membrane perforations [8]. Delayed treatment may lead to extracranial and intracranial complications. Surgical intervention aims to eliminate recurrent infection and achieve a dry, safe ear. The most common procedures include mastoidectomy and tympanoplasty. Mastoidectomy removes infected tissue, while tympanoplasty restores hearing function impaired by CSOM. However, tympanoplasty is contraindicated in children under five years of age due to recurrent infections and immature Eustachian tube function [6].

## II. METHODS

### *Patient Status*

#### *Patient Identification*

- Name: Mrs. T
- Age: 61 years
- Address: Kayu Tinggi, Rorotan, East Jakarta
- Occupation: Merchant
- Education: Elementary School
- Ethnicity: Sundanese
- Religion: Islam
- Marital Status: Married

#### *Medical History*

- Chief Complaint: The patient presented with right ear discharge for the past four months prior to hospital admission.
- Additional Complaints: The patient experienced pain and a sensation of fullness in the right ear.

#### *History of Present Illness*

A 61-year-old female presented with persistent right ear discharge for four months before admission. Initially, the discharge appeared clear but later became blood-stained. The complaint was accompanied by continuous ear pain radiating to the head and a sensation of ear fullness. Symptoms first appeared in 2024 when the patient frequently cleaned her ear manually, worsening at the beginning of 2025 [9]. The patient previously sought medical treatment at Mulya Sari Hospital, North Jakarta, where she received paracetamol, vitamins, and antibiotics, but her symptoms persisted. The condition worsened whenever she attempted to clean her ear. She also reported intermittent tinnitus and dizziness, particularly when standing or walking. The patient denied fever, cough, cold, nausea, or vomiting [10].

#### *Past Medical and Personal History*

The patient had similar complaints in 2024 and has a history of hypertension (regularly takes amlodipine 10 mg). She habitually cleans her ear using cotton buds.

#### *Family History*

No family members have experienced similar symptoms.

#### *Physical Examination*

- General Condition: Good
- Consciousness: Compos mentis
- Blood Pressure: 140/70 mmHg
- Pulse Rate: 108 beats/min
- Respiratory Rate: 20 breaths/min
- Temperature: 36.7°C

#### *General Status*

- Head: Normocephalic
- Eyes: No conjunctival anemia or scleral icterus
- Neck: No palpable lymphadenopathy
- Thorax:
  - Lungs: Symmetrical chest movement; tactile fremitus equal bilaterally; sonorous percussion; vesicular breath sounds; no rhonchi or wheezing.
  - Heart: Normal cardiac borders; normal heart sounds; no murmurs or gallops detected.
- Abdomen: Flat contour; normoactive bowel sounds; liver and spleen not palpable; no tenderness; tympanic on percussion.
- Extremities: Warm, no cyanosis, no edema; physiological reflexes present; pathological reflexes absent.
- Skin: Medium brown complexion; no urticaria.

*Otorhinolaryngological Examination*  
*Ear Examination*

<b>Examination</b>	<b>Right Ear</b>	<b>Left Ear</b>
Auricle	Normal shape; no deformity or infection	Normal
Preauricular area	No fistula, abscess, or scar	No abnormality
Retroauricular area	No swelling or tenderness	No abnormality
External auditory canal	Patent; hyperemic epidermis; mucopurulent discharge present; cerumen present	Patent; normal color; no discharge
Tympanic membrane	Central perforation; pale gray color; absent light reflex	Intact; pearl-gray color; normal light reflex at 7 o'clock position
Hearing Tests	Rinne: positive (right), negative (left); Weber: lateralized to left; Schwabach: prolonged bilaterally	—

*Clinical Evaluation and Management*

Nasal examination revealed a normal, symmetrical structure with clear cavities, pink mucosa, and no deformity, discharge, or sinus tenderness. Throat examination showed T1–T1 tonsils with smooth surfaces, healthy pharynx, intact dentition, and no lymph node enlargement. The patient was diagnosed with Chronic Suppurative Otitis Media (Benign Type) of the Right Ear (Auris Dextra), with differential diagnoses including malignant-type CSOM and acute otitis media in the perforation stage. Management included ear toilet with sterile water, patient education on ear hygiene and water avoidance, and pharmacological therapy of Levofloxacin 500 mg twice daily and Cetirizine 10 mg once daily. Prognosis was bonam for life expectancy and dubia ad bonam for both functional recovery and curability[11].

### III. RESULT AND DISCUSSION

#### **Case Identification and Patient Profile**

The patient was a 61-year-old female diagnosed with Chronic Suppurative Otitis Media (CSOM), benign type. Epidemiological studies consistently indicate a higher prevalence of CSOM among females, aligning with findings [12]. (2018–2021) at Ibnu Sina Hospital, Makassar, which reported female predominance. Although CSOM commonly affects children and young adults, this case demonstrates that chronic middle ear infections can also occur in elderly individuals due to long-standing ear manipulation and recurrent infection episodes.

#### **Anamnesis and Symptom Profile**

The patient complained of persistent right ear discharge for approximately one year, initially clear but later mixed with blood, accompanied by ear pain radiating to the head, fullness, tinnitus, and dizziness when standing or walking. These symptoms are characteristic of chronic middle ear infection lasting more than six weeks. The presence of blood-stained discharge may indicate granulation tissue or irritation caused by frequent ear picking, a known aggravating factor for CSOM. The absence of systemic symptoms such as fever, cough, or malaise excludes acute or systemic infection, supporting the diagnosis of benign CSOM without complications.

#### **Physical and Otoscopic Findings**

General examination showed the patient to be alert (*compos mentis*) with stable vital signs and afebrile, suggesting the absence of acute systemic inflammation. Otoscopic evaluation revealed a central tympanic membrane perforation with pale-gray coloration, absent light reflex, and mucopurulent discharge hallmark features of benign CSOM. The presence of mild tenderness in the retroauricular area may indicate localized mastoid involvement, but no evidence of intracranial extension was found. The findings collectively confirmed an active, localized infection consistent with the safe (benign) type of CSOM.

#### **Supporting Examinations**

Otосcopy served as the principal diagnostic tool to identify central perforation and evaluate the middle ear mucosa. Audiometric assessment, though not performed, is recommended to quantify conductive hearing loss commonly associated with CSOM. In complex or recurrent cases, CT scanning of the temporal

bone and culture of ear secretions can help detect cholesteatoma, bone erosion, or antibiotic resistance, ensuring targeted therapy.

### **Diagnosis and Interpretation**

Based on the history and examination, the working diagnosis was Chronic Suppurative Otitis Media, Benign Type, Right Ear (Auris Dextra). The chronic course (>2 months), mucopurulent discharge, and central perforation support this diagnosis. Differential diagnoses included malignant-type CSOM (excluded by absence of cholesteatoma and marginal perforation) and acute otitis media at the perforation stage (ruled out due to chronicity). The patient's dizziness was attributed to mild labyrinthine irritation rather than serious complications.

### **Treatment and Therapeutic Approach**

The management strategy followed the WHO guidelines emphasizing infection eradication and restoration of a dry ear. The patient received Levofloxacin 500 mg twice daily for one week and Paracetamol 500 mg thrice daily as needed, alongside aural toilet using sterile suction and cotton bud for exudate removal. Non-pharmacological measures included keeping the ear dry, avoiding swimming, refraining from ear picking, and attending routine follow-ups. Antibiotic selection and duration (7–14 days) were consistent with evidence-based management of benign CSOM to prevent relapse and complications.

### **Prognosis**

The prognosis for benign CSOM is generally good (bonam) if managed promptly and appropriately.

- **Quo ad vitam:** Good, as the disease rarely affects life expectancy.
- **Quo ad functionam:** Doubtful to good (dubia ad bonam), depending on the degree of ossicular damage and success in infection control.
- **Quo ad sanationam:** Doubtful to good (dubia ad bonam), since spontaneous closure of long-standing tympanic perforations is uncommon, and surgical repair (tympanoplasty) may be required for complete recovery.

## **IV. CONCLUSION**

This case report demonstrates that Chronic Suppurative Otitis Media (CSOM) of the benign type remains a common yet manageable condition when properly diagnosed and treated. The patient a 61 year old female presented with characteristic chronic symptoms, including persistent mucopurulent discharge and a central tympanic membrane perforation, consistent with the benign form of CSOM. Comprehensive evaluation through anamnesis, otoscopic examination, and supportive findings confirmed the diagnosis and excluded malignant-type CSOM and acute perforative otitis media. Effective management relied on a combination of aural toilet, systemic antibiotic therapy (Levofloxacin), and patient education on ear hygiene and water avoidance. This conservative approach successfully addressed infection control and symptom relief while preventing further complications. In conclusion, early recognition and continuous management of CSOM are crucial to achieving optimal outcomes. The prognosis for benign CSOM is generally favorable, particularly when patients adhere to prescribed therapy and preventive measures. Long-term follow-up and potential surgical interventions such as tympanoplasty may be considered to restore hearing and ensure complete recovery.

## **V. ACKNOWLEDGMENTS**

The authors express their sincere gratitude to the medical and academic teams at the Department of Otorhinolaryngology, as well as to the Clinical Laboratory of Universitas Kristen Indonesia, for their valuable assistance and diagnostic support in managing this case. Special appreciation is also extended to the ENT specialists and nursing staff involved in the patient's care for their professional contributions during the clinical evaluation and follow-up process. The authors acknowledge the patient for her cooperation and consent in sharing her clinical data for educational and research purposes. Finally, the authors thank the Faculty of Medicine, Universitas Kristen Indonesia, for providing the institutional and ethical framework that made this case study possible.

## REFERENCES

- [1] Z. Ayaz, B. Taj, M. S. Yaseen, U. Ishaq, T. Laique, and J. Malik, "Causality of Chronic Suppurative Otitis Media : An Observational Study," vol. 12, no. 8, pp. 10–13, 2020, doi: 10.7759/cureus.9832.
- [2] Z. S. Abraham *et al.*, "Prevalence and etiological agents for chronic suppurative otitis media in a tertiary hospital in Tanzania," *BMC Res. Notes*, vol. 12, no. 1, pp. 1–6, 2019, doi: 10.1186/s13104-019-4483-x.
- [3] F. Bader Alkatiri, "Kriteria Diagnosis Dan Penatalaksanaan Otitis Media Supuratif Kronis," *Intisari Sains Medis*, vol. 5, no. 1, pp. 100–105, 2016, doi: 10.15562/ism.v5i1.42.
- [4] S. P. M. Wijayanti *et al.*, "Risk factors for acute otitis media in primary school children: A case-control study in Central Java, Indonesia," *J. Public Health Res.*, vol. 10, no. 1, pp. 1–6, 2021, doi: 10.4081/jphr.2021.1909.
- [5] K. Dongol, P. Rayamajhi, and U. Gurung, "Complications of Acute and Chronic Otitis Media in a Tertiary Referral Center in Nepal," *Turkish Arch. Otorhinolaryngol.*, vol. 58, no. 4, pp. 234–240, 2021, doi: 10.5152/tao.2020.5761.
- [6] Laia, O. ., Lestari Nasution, S. ., & Ginting, . J. . (2023). Evaluation Of The Implementation Of Primary Care (P-Care) Application At Puskesmas Onolalu Nias Selatan In 2022. *International Journal of Health and Pharmaceutical (IJHP)*, 3(4), 629–636. <https://doi.org/10.51601/ijhp.v3i4.224>
- [7] Duha, K. B., Lestari Ramadhani Nasution, S. ., Girsang, E. ., & Suyono, T. . (2022). Analysis of Efficiency Of KDT-OAT and Removal Preparations on The Recovery of Pulmonary Tuberculosis. *International Journal of Health and Pharmaceutical (IJHP)*, 2(2), 284–289. <https://doi.org/10.51601/ijhp.v2i2.43>
- [8] Rachmi Yuana, S., Girsang, E. ., & Ginting, . L. . (2023). Analysis Of The Influence Of Leader Behavior And Public Health Center Management Processes On Immunization Program Performance At Kuala Bali Public Health Center, Serdang Bedagai. *International Journal of Health and Pharmaceutical (IJHP)*, 3(4), 594–601. <https://doi.org/10.51601/ijhp.v3i4.211>
- [9] Noni Rokaya Pasaribu, Ermi Girsang, Sri Lestari Ramadhani Nasution, & Chrismis Novalinda Ginting. (2022). Evaluation Of Planning And Implementation Occupational Safety And Health In Hospital Embung Fatimah Batam In 2021. *International Journal of Health and Pharmaceutical (IJHP)*, 2(2), 225–232. <https://doi.org/10.51601/ijhp.v2i2.34>
- [10] Y. Farida, D. Oktaria, F. Kedokteran, and U. Lampung, "Tatalaksana Terkini Otitis Media Supuratif Kronis ( OMSK ) Current Treatment of Chronic Suppurative Otitis Media ( CSOM )," *Fak. Kedokteran, Univ. Lampung Abstr.*, vol. 6, no. 1, 2016.
- [11] H. F. Pauna *et al.*, "Speech language development after cochlear implants in prelingual children according to the age of implantation," *Indian J. Otol.*, vol. 23, no. 3, pp. 1–5, 2017, doi: 10.4103/indianjotol.INDIANJOTOL.
- [12] S. F. Hardiansyah, "That's in the Bible? : the ultimate learn-as-you-play Bible quizbook," p. 230, 2022.
- [13] M. Khairkar, P. Deshmukh, H. Maity, and V. Deotale, "Chronic Suppurative Otitis Media: A Comprehensive Review of Epidemiology, Pathogenesis, Microbiology, and Complications," *Cureus*, vol. 15, no. 8, 2023, doi: 10.7759/cureus.43729.
- [14] B. Nadeak, J. Manik, and D. Destine, "The Effectiveness of Managerial Approaches in Promoting Adolescent Healthy Lifestyles : A Qualitative Study at HKBP Gedong Church The Effectiveness of Managerial Approaches in Promoting Adolescent Healthy Lifestyles : A Qualitative Study at HKBP Gedong Ch," no. January, 2025, doi: 10.38177/AJBSR.2025.7212.
- [15] T. D. Parhusip *et al.*, "Bakteri Penyebab Otitis Media Supuratif Kronis di Rumah Sakit Umum Universitas Kristen Indonesia," *Maj. Kedokt. UKI*, vol. 36, no. 1, pp. 19–23, 2021, doi: 10.33541/mk.v36i1.2988.
- [16] E. Narendra and K. A. D. Saputra, "Karakteristik penderita otitis media supuratif kronis (OMSK) yang menjalani operasi di RSUP Sanglah," *Medicina (B. Aires).*, vol. 51, no. 1, pp. 46–49, 2020, doi: 10.15562/medicina.v51i1.749.