

DAFTAR PUSTAKA

1. Brown A, Kumar S, Tchounwou PB. Cisplatin-Based Chemotherapy of Human Cancers. *J Cancer Sci Ther*. 2019;11(4).
2. Aupérin A. Epidemiology of head and neck cancers: an update. *Curr Opin Oncol*. 2020 May;32(3):178–86.
3. Rybak LP, Whitworth CA. Ototoxicity: Therapeutic opportunities. *Drug Discov Today*. 2005;10(19):1313–21.
4. Gratton MA, Smyth BJ. Ototoxicity of Platinum Compounds. In: Roland PS, Rutka JA, editors. *Ototoxicity*. London: Decker; 2004. p. 60–72.
5. Paken J, Govender CD, Pillay M, Sewram V. Cisplatin-Associated Ototoxicity: A Review for the Health Professional. *J Toxicol*. 2016;2016:1–13.
6. Sturgeon J. Clinical Uses of Cisplatin. In: Rouland, Rutka, editors. *Ototoxicity*. 1st ed. London: BC Decker; 2004. p. 50–9.
7. Yoo J, Hamilton SJ, Angel D, Fung K, Franklin J, Parnes LS, et al. Cisplatin otoprotection using transtympanic L-N-acetylcysteine: A pilot randomized study in head and neck cancer patients. *Laryngoscope*. 2014 Mar;124(3):E87–94.
8. Gonçalves MS, Silveira AF, Teixeira AR, Hyppolito MA. Mechanisms of cisplatin ototoxicity: theoretical review. *J Laryngol Otol*. 2013 Jun 7;127(6):536–41.
9. Arora R, Thakur JS, Azad RK, Mohindroo NK, Sharma DR, Seam RK. Cisplatin-based chemotherapy: Add high-frequency audiometry in the regimen. *Indian J Cancer*. 2009;46(4):311.
10. Callejo A, Sedó-Cabezón L, Juan I, Llorens J. Cisplatin-Induced Ototoxicity: Effects, Mechanisms and Protection Strategies. *Toxics*. 2015 Jul 15;3(3):268–93.
11. Rahman S, Alviandi W, Edward Y, Firdaus MA, Machmud R, Kedokteran F, et al. Gambaran audiogram nada murni penderita karsinoma kepala dan leher yang mendapat satu siklus kemoterapi cisplatin. *Maj Kedokt Andalas*. 2000;34:51–9.
12. Sarafraz Z, Ahmadi A, Daneshi A. Transtympanic Injections of N-acetylcysteine and Dexamethasone for Prevention of Cisplatin-Induced Ototoxicity: Double Blind Randomized Clinical Trial. *Int Tinnitus J*. 2018;22(1):40–5.
13. Chirtes F, Albu S. Prevention and Restoration of Hearing Loss Associated with the Use of Cisplatin. *Biomed Res Int*. 2014;2014:1–9.
14. Rybak LP, Ramkumar V. Ototoxicity. *Kidney Int*. 2007 Oct;72(8):931–5.
15. Santosa YI, Samiadi D, Aroeman NA, Fianza PI. Pengaruh Alfa Tokoferol pada Efek Ototoksik Sisplatin. *Maj Kedokt Bandung*. 2012 Dec;44(4):205–12.
16. Barata RMK, Boesoirie MTS, Poerwana RAS. Peran Ginkgo biloba terhadap pencegahan gangguan dengar sensorineural pada terapi sisplatin penderita tumor ganas. *Oto Rhino Laryngol Indones*. 2015 Apr 7;44(2):96.

17. van den Berg JH, Beijnen JH, Balm AJM, Schellens JHM. Future opportunities in preventing cisplatin induced ototoxicity. *Cancer Treat Rev.* 2006 Aug;32(5):390–7.
18. Rybak LP, Dhukhwa A, Mukherjea D, Ramkumar V. Local Drug Delivery for Prevention of Hearing Loss. *Front Cell Neurosci.* 2019 Jul 9;13:300.
19. Laurell G. Pharmacological intervention in the field of ototoxicity. *HNO.* 2019;67(6):434–9.
20. Marshak T, Steiner M, Kaminer M, Levy L, Shupak A. Prevention of Cisplatin-Induced Hearing Loss by Intratympanic Dexamethasone. *Otolaryngol Neck Surg.* 2014 Jun 11;150(6):983–90.
21. Nasr W, Abdelhady M, Abd Elbary M, Nada E. Treatment of cisplatin-induced ototoxicity by intra-tympanic corticosteroid injection. *Indian J Otol.* 2018 Jan 1;24(1):33–7.
22. Riga MG, Chelis L, Kakolyris S, Papadopoulos S, Stathakidou S, Chamalidou E, et al. Transtympanic Injections of N-acetylcysteine for the Prevention of Cisplatin-induced Ototoxicity. *Am J Clin Oncol.* 2013 Feb;36(1):1–6.
23. Pawlowski KS. Anatomy and Physiology of the Cochlea. In: Roland PS, Rutka JA, editors. *Ototoxicity.* 1st ed. London: BC Decker; 2004. p. 1–19.
24. Gacek RR. Anatomy of the Auditory and Vestibular Systems. In: Wackym PA, Snow JB, editors. *Ballenger's Otorhinolaryngology Head and Neck Surgerry.* 18th ed. Philadelphia: PMPH-USA; 2016. p. 62–108.
25. Dallos P, Fakler B. Prestin, a new type of motor protein. *Nat Rev Mol Cell Biol.* 2002;3(2):104–11.
26. Dhingra P, Dhingra S. Diseases of Ear, Nose and Throat & Head and Neck Surgery. 7th ed. Dhingra P, Dhingra S, editors. New Delhi: Elsevier; 2018. 1–529 p.
27. Watts K. Ototoxicity: Visualized in Concept Maps. *Semin Hear.* 2019 May 26;40(02):177–87.
28. Rybak LP. Ototoxicity. In: Wackym PA, editor. *Ballenger's Otorhinolaryngology Head and Neck Surgerry.* 18th ed. Philadelphia: PMPH-USA; 2016. p. 1014–34.
29. Forge A. Otoxicity. In: Watkinson JC, Clarke RW, editors. *Scott-Brown's Otorhinolaryngology: Head and Neck Surgery 8Ed.* 2nd ed. London: Taylor & Francis Group; 2018. p. 721–33.
30. Alderden RA, Hall MD, Hambley TW. The Discovery and Development of Cisplatin. *J Chem Educ.* 2006 May 1;83(5):728.
31. Gentilin E, Simoni E, Candito M, Cazzador D, Astolfi L. Cisplatin-Induced Ototoxicity: Updates on Molecular Targets. *Trends Mol Med.* 2019;25(12):1123–32.
32. Yancey A, Harris MS, Egbelakin A, Gilbert J, Pisoni DB, Renbarger J. Risk factors for cisplatin-associated ototoxicity in pediatric oncology patients. *Pediatr Blood Cancer.* 2012 Jul 15;59(1):144–8.
33. Ghosh S. Cisplatin: The first metal based anticancer drug. *Bioorg Chem.* 2019 Jul;88:102925.
34. Laurell G, Andersson A, Engström B, Ehrsson H. Distribution of cisplatin in perilymph and cerebrospinal fluid after intravenous administration in the guinea pig. *Cancer Chemother Pharmacol.* 1995;36(1):83–6.

35. Shoffi N, Romdhoni A. Peran Cisplatin Pada Kejadian Senescence Sel Kanker. *J THT-KL*. 2013;6:125–33.
36. Utami S. Peran Kaspase pada Apoptosis sebagai Salah Satu Usaha dalam Kemoterapi Kanker. *Jkm*. 2007;7:91–7.
37. Rybak LP, Mukherjea D, Jajoo S, Ramkumar V. Cisplatin Ototoxicity and Protection: Clinical and Experimental Studies. *Tohoku J Exp Med*. 2009;219(3):177–86.
38. Hodge SE, Lopez IA, Ishiyama G, Ishiyama A. Cisplatin ototoxicity histopathology. *Laryngoscope Investig Otolaryngol*. 2021 Aug 28;6(4):852–6.
39. Rybak PL. Vestibular and Auditory Ototoxicity. In: Flint WP, editor. *Cummings Otolaryngology Head & Neck Surgery*. 5th ed. Philadelphia; 2010. p. 2170–8.
40. Comis SD, Rhys-Evans PH, Osborne MP, Pickles JO, Jeffries DJR, Pearse HAC. Early morphological and chemical changes induced by cisplatin in the guinea pig organ of Corti. *J Laryngol Otol*. 1986 Dec 29;100(12):1375–83.
41. Ganesan P, Schmiedge J, Manchaiah V, Swapna S, Dhandayutham S, Kothandaraman PP. Ototoxicity: A Challenge in Diagnosis and Treatment. *J Audiol Otol*. 2018 Apr 10;22(2):59–68.
42. Campbell KC. Audiologic Monitoring for Ototoxicity. In: Roland PS, Rutka JA, editors. *Ototoxicity*. London: BC Decker; 2004. p. 154–60.
43. Al Malky G. Audiological monitoring in ototoxicity - Are we doing enough? *ENT and Audiology News*. 2016;92–4.
44. Putri MH, Rahaju P, Indrasworo D. Hubungan ototoksitas dan kemoterapi neoadjuvan pada karsinoma nasofaring berdasarkan ASHA, CTCAE, dan DPOAE. *ORLI*. 2017;47(2):102–12.
45. Durrant JD, Campbell K, Fausti S, Guthrie OW, Jacobson G, Lonsbury-Martin BL, et al. American Academy of Audiology Position Statement and Clinical Practice Guidelines: Ototoxicity Monitoring. *Am Acad Audiol*. 2009;(October):1–25.
46. Van de Water TR, Rybak LP. Ototoxic Damage to Hearing: Otoprotective Therapies. In: Roland PS, Rutka JA, editors. *Ototoxicity*. London: Decker; 2004. p. 170–83.
47. Schwalfenberg GK. N-Acetylcysteine: A Review of Clinical Usefulness (an Old Drug with New Tricks). Emanuelli T, editor. *J Nutr Metab*. 2021 Jun 9;2021:1–13.
48. Aldini G, Altomare A, Baron G, Vistoli G, Carini M, Borsani L, et al. N-Acetylcysteine as an antioxidant and disulphide breaking agent: the reasons why. *Free Radic Res*. 2018 Jul 3;52(7):751–62.
49. Dodd S, Dean O, Copolov DL, Malhi GS, Berk M. N -acetylcysteine for antioxidant therapy: pharmacology and clinical utility. *Expert Opin Biol Ther*. 2008 Dec 6;8(12):1955–62.
50. Cristina M, Graciliano NG, Andr F. N -Acetylcysteine (NAC): Impacts on Human Health. *Antioxidants*. 2021;967.
51. Gausterer JC, Saidov N, Ahmadi N, Zhu C, Wirth M, Reznicek G, et al. Intratympanic application of poloxamer 407 hydrogels results in sustained N-acetylcysteine delivery to the inner ear. *Eur J Pharm Biopharm*. 2020 May;150:143–55.

52. Tenório MCDS, Graciliano NG, Moura FA, de Oliveira ACM, Goulart MOF. N-acetylcysteine (Nac): Impacts on human health. *Antioxidants*. 2021;10(6).
53. Dodd S, Dean O, Copolov DL, Malhi GS, Berk M. Drug Evaluation N - acetylcysteine for antioxidant therapy : pharmacology and. 2008;1955–62.
54. Thomas Dickey D, Muldoon LL, Kraemer DF, Neuwelt EA. Protection against cisplatin-induced ototoxicity by N-acetylcysteine in a rat model. *Hear Res*. 2004 Jul;193(1–2):25–30.
55. Choe WT, Chinosornvatana N, Chang KW. Prevention of cisplatin ototoxicity using transtympanic N-acetylcysteine and lactate. *Otol Neurotol*. 2004 Nov;25(6):910–5.
56. Patel J, Szczupak M, Rajguru S, Balaban C, Hoffer ME. Inner Ear Therapeutics: An Overview of Middle Ear Delivery. *Front Cell Neurosci*. 2019;13.
57. Piu F, Bishop KM. Local Drug Delivery for the Treatment of Neurotology Disorders. *Front Cell Neurosci*. 2019 Jun 3;13(June):1–11.
58. Salt AN, Plontke SK. Pharmacokinetic principles in the inner ear: Influence of drug properties on intratympanic applications. *Hear Res [Internet]*. 2018;368:28–40. Available from: <https://doi.org/10.1016/j.heares.2018.03.002>
59. Lavigne P, Lavigne F, Saliba I. Intratympanic corticosteroids injections: a systematic review of literature. *Eur Arch Oto-Rhino-Laryngology*. 2016 Sep 23;273(9):2271–8.
60. Nyberg S, Abbott NJ, Shi X, Steyger PS, Dabdoub A. Delivery of therapeutics to the inner ear: The challenge of the blood-labyrinth barrier. *Sci Transl Med*. 2019 Mar 6;11(482).
61. Singh A, Kumar Irugu DV. Sudden sensorineural hearing loss – A contemporary review of management issues. *J Otol*. 2020 Jun;15(2):67–73.
62. Meyer T. Intratympanic treatment for tinnitus: A review. *Noise Heal*. 2013;15(63):83.
63. Liu Y, Chi F, Yang T, Liu T. Assessment of complications due to intratympanic injections. *World J Otorhinolaryngol - Head Neck Surg*. 2016;2(1):13–6.
64. Ata N, Öztürk K, Gezgin B. Comparison of the effects of the temperature of intratympanic dexamethasone injections on vertigo. *Am J Otolaryngol - Head Neck Med Surg*. 2019;40(5):653–5.
65. Dahlan MS. Besar Sampel Dan Cara Pengambilan Sampel Dalam Penelitian. 3rd ed. Susila A, editor. Jakarta: Salemba Medika; 2021. 61 p.
66. Aupérin A. Epidemiology of head and neck cancers: an update. *Curr Opin Oncol*. 2020 May;32(3):178–86.
67. Nathania N, Dewi YA, Permana AD. Profile of Head and Neck Cancer Patients at Hasan Sadikin Hospital in 2013-2018. *Oto Rhino Laryngol Indones*. 2021 Jan 2;50(2):141.
68. Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*. 2018;68(6):394–424.
69. Adham M, Kurniawan AN, Muhtadi AI, Roezin A, Hermani B,

- Gondhowiardjo S, et al. Nasopharyngeal carcinoma in Indonesia: epidemiology, incidence, signs, and symptoms at presentation. *Chin J Cancer*. 2012 Apr 5;31(4):185–96.
70. Choe WT, Chinosornvatana N, Chang KW. Prevention of cisplatin ototoxicity using transtympanic N-acetylcysteine and lactate. *Otol Neurotol*. 2004;25(6):910–5.
 71. Laurell G, Jungnelius U. High-Dose Cisplatin Treatment. *Laryngoscope*. 1990 Jul;100(7):724-734.
 72. Singh R, Birru B, Veit JGS, Arrigali EM, Serban MA. Development and Characterization of an In Vitro Round Window Membrane Model for Drug Permeability Evaluations. Vol. 15, *Pharmaceuticals*. 2022.
 73. Szeto B, Chiang H, Valentini C, Yu M, Kysar JW, Lalwani AK. Inner ear delivery: Challenges and opportunities. *Laryngoscope Investig Otolaryngol*. 2020 Feb;5(1):122–31.
 74. Nader ME, Théorêt Y, Saliba I. The role of intratympanic lactate injection in the prevention of cisplatin-induced ototoxicity. *Laryngoscope*. 2010 Jun;120(6):1208–13.
 75. Truong MT, Winzelberg J, Chang KW. Recovery from cisplatin-induced ototoxicity: A case report and review. *Int J Pediatr Otorhinolaryngol*. 2007 Oct;71(10):1631–8.
 76. Snapp HA, Schaefer Solle N, Millet B, Rajguru SM. Subclinical Hearing Deficits in Noise-Exposed Firefighters. *Int J Environ Res Public Health*. 2022 Sep;19(17):11028.
 77. Liu Y, Chi F, Yang T, Liu T. Assessment of complications due to intratympanic injections. *World J Otorhinolaryngol - Head Neck Surg*.
 78. Araújo MM de, Murashima AAB, Alves VM, Jamur MC, Hyppolito MA. Spontaneous healing of the tympanic membrane after traumatic perforation in rats. *Braz J Otorhinolaryngol*. 2014 Jul;80(4):330–8.

