



UNIVERSITAS ANDALAS

**PENGARUH MIRINGOPLASTI MEMBRAN AMNION DAN
PLATELET RICH PLASMA TERHADAP PERFORASI DAN
AMBANG DENGAR PENDERITA OTITIS MEDIA
SUPURATIF KRONIS**

TESIS

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ABSTRAK

PENGARUH MIRINGOPLASTI MEMBRAN AMNION DAN PLATELET RICH PLASMA TERHADAP PERFORASI DAN AMBANG DENGAR PENDERITA OTITIS MEDIA SUPURATIF KRONIS

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Latar Belakang : Otitis Media Supuratif Kronis (OMSK) merupakan inflamasi telinga tengah yang ditandai dengan perforasi membran timpani, keluar cairan atau riwayat keluar cairan dari telinga yang lebih dari 8 minggu. OMSK dibagi menjadi tipe tanpa kolesteatoma dan suspek tipe kolesteatoma. Keluhan yang dirasakan oleh penderita adalah penurunan pendengaran, telinga berdenging dan telinga terasa penuh. Tatalaksana perforasi membran timpani pada OMSK tipe tanpa kolesteatoma meliputi observasi dan tindakan pembedahan. Tindakan pembedahan meliputi miringoplasti, timpanoplasti. Miringoplasti dibagi menjadi *patch* miringoplasti dan *graft* miringoplasti. Membran amnion adalah salah satu yang dapat digunakan sebagai *bridging* pada *patch* miringoplasti. Membran amnion memiliki growth factor seperti EGF, TGF- β , FGF and PDGF A dan B. Biofaktor aktif seperti *platelet rich plasma* dapat digunakan pada tindakan miringoplasti karena memiliki growth factor sehingga mempercepat regenerasi dari epitel, endotel, dan epidermal. **Tujuan :** Mengetahui pengaruh miringoplasti membran amnion dan platelet rich plasma terhadap perforasi dan ambang dengar penderita otitis media supuratif kronis. **Metode :** Penelitian *experimental pre and post test one group design*. Pasien OMSK tipe aman yang memenuhi kriteria inklusi dilakukan pengukuran perforasi membran timpani dan audiometri nada murni. Pasien kemudian dilakukan tindakan *patch* miringoplasti dengan menggunakan kombinasi membran amnion dan platelet rich plasma. Membran amnion dipertahankan selama 8 minggu dan kemudian dilakukan evaluasi ulang ukuran perforasi membran timpani dan audiometri nada murni setelahnya. **Hasil :** Sebanyak 14 pasien dilakukan tindakan *patch* miringoplasti kombinasi membran amnion dan *platelet rich plasma*. Didapatkan angka keberhasilan sebesar 50 %. Terdapat perubahan ukuran perforasi membran timpani yang bermakna dengan nilai $p < 0,05$ sebelum dan sesudah miringoplasti. Terdapat perubahan audiometri yang bermakna dengan nilai $p < 0,05$ sebelum dan sesudah miringoplasti. **Kesimpulan :** Terdapat perbedaan ukuran perforasi dan audiometri nada murni sebelum dan sesudah tindakan miringoplasti yang bermakna secara statistik.

Kata kunci : *Platelet rich plasma*, Membran amnion, Miringoplasti, Perforasi membran timpani

ABSTRACT

THE EFFECT OF MYRINGOPLASTY USING COMBINATION OF AMNIOTIC MEMBRANE AND PLATELET RICH PLASMA TO PERFORATION AND HEARING THRESHOLD IN CHRONIC SUPPURATIVE OTITIS MEDIA PATIENTS

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Background : *Chronic Suppurative Otitis Media (CSOM) is inflammation of the middle ear which is characterized by perforation of the tympanic membrane, discharge or a history of discharge from the ear for more than 8 weeks. CSOM is divided into the type without cholesteatoma and the suspected cholesteatoma type. Patients complaints are hearing loss, ringing in the ears (tinnitus) and fullness sesnastion. Management of tympanic membrane perforation in CSOM without cholecetatoma includes observation and surgery. Surgical procedures include myringoplasty, tympanoplasty. Myringoplasty is divided into patch myringoplasty and graft myringoplasty. The amniotic membrane is one that can be used as a epithelial bridging in patch myringoplasty. The amniotic membrane has growth factors such as EGF, TGF- β , FGF and PDGF A and B. Active biofactors such as platelet rich plasma can be used in myringoplasty procedures because they have growth factors that accelerate the regeneration of the epithelium, endothelium and epidermis.* **Objective :** *To determine the effect of amniotic membrane myringoplasty and platelet rich plasma on perforation and hearing threshold in patients with chronic suppurative otitis media.* **Method :** *Experimental research pre and post test one group design. Safe type CSOM patients who met the inclusion criteria had tympanic membrane perforation measured and pure tone audiometry. The patient then underwent patch myringoplasty using a combination of amniotic membrane and platelet rich plasma. The amniotic membrane was maintained for 8 weeks and then re-evaluated the size of the tympanic membrane perforation and pure tone audiometry thereafter.* **Results :** *A total of 14 patients underwent patch myringoplasty with a combination of amniotic membrane and platelet rich plasma. Obtained a success rate of 50%. There was a significant change in the size of the tympanic membrane perforation with a p value <0.05 before and after myringoplasty. There were significant audiometric changes with a p value <0.05 before and after myringoplasty.* **Conclusion :** *There is a statistically significant difference in perforation size and pure tone audiometry before and after myringoplasty.*

Keyword : *Platelet rich plasma, Amniotic membrane, Myringoplasty, Tympanic membrane perforation*



