

# We Must Keep in Mind Aspergillus in the Etiology of Facial Nerve Paralysis

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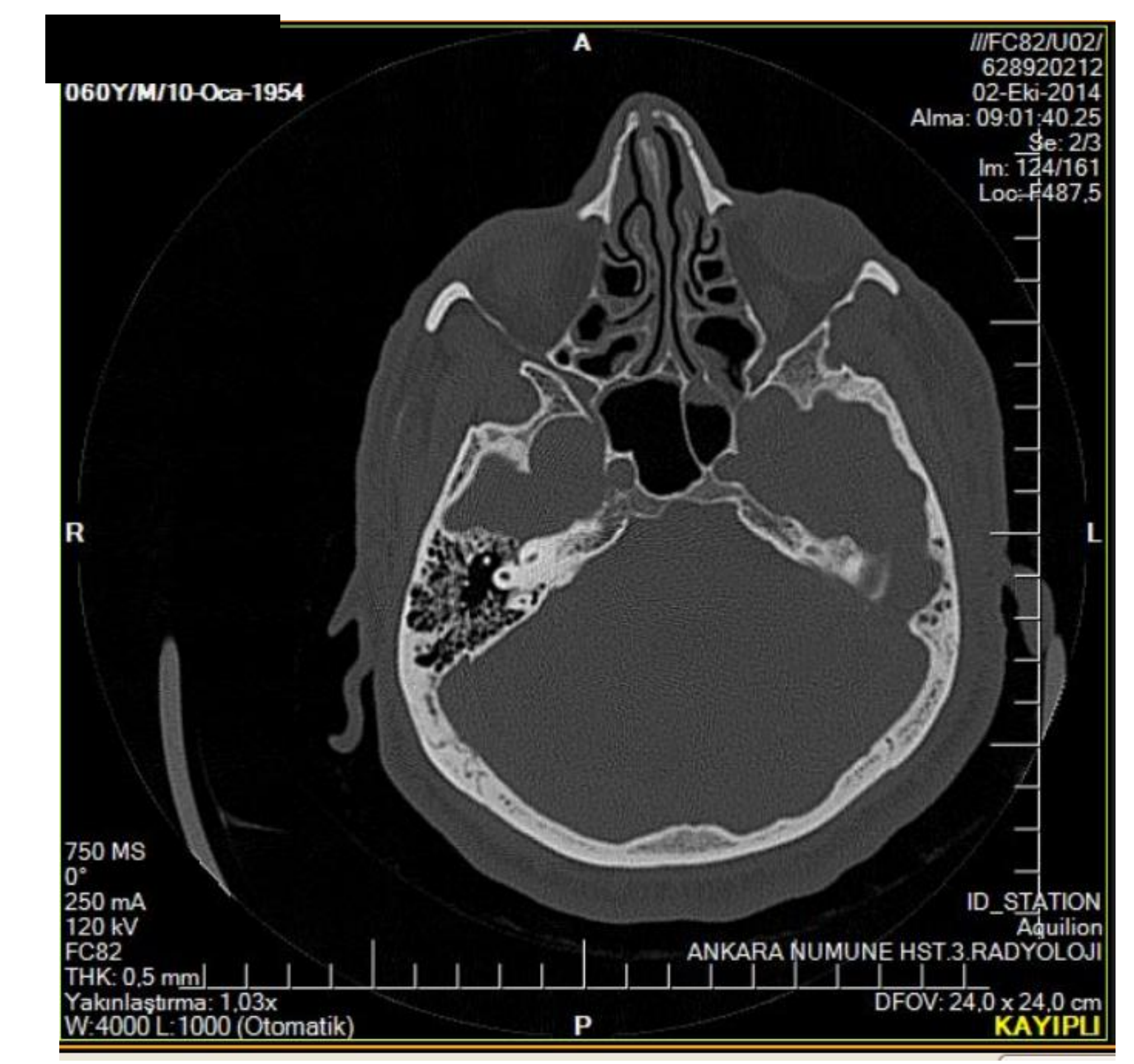
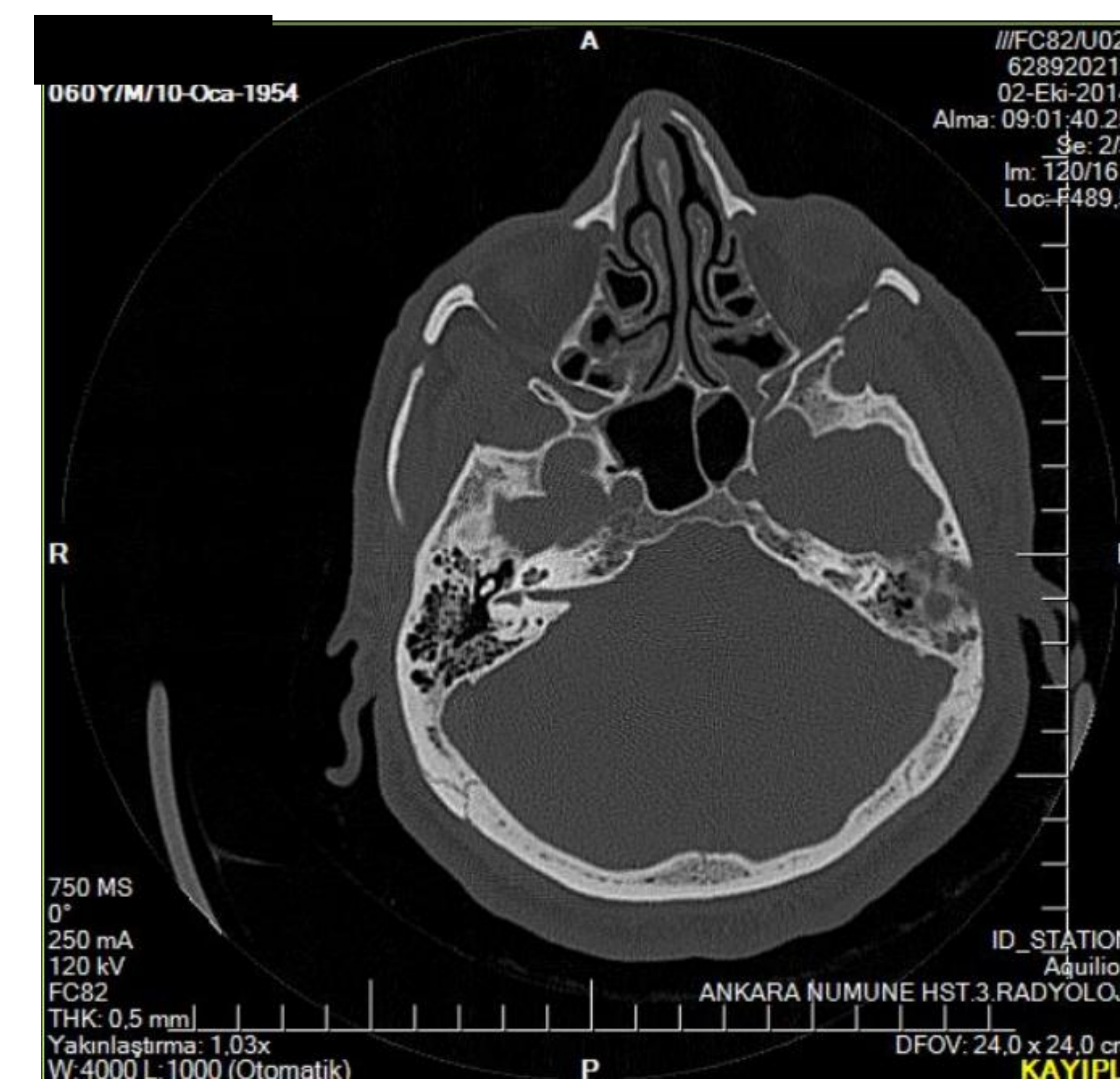
## Objectives

*Aspergillus* spp. is an important infectious pathogen for immunocompromised patients in haematology, oncology and transplantation unit. *Aspergillus* infections of ear are mostly affect the external auditory canal. *Aspergillus* related chronic otitis media is extremely rare. Here, we report a case of chronic otitis media presented with facial nerve paralysis which was related with *Aspergillus* spp. and histopathologically proven

## Case

A 60-year-old male patient had referred to the Ear-Nose-Throat Clinic of another hospital with the complaint of headache, otalgia, tinnitus, facial nerve paralysis. He had uncontrolled diabetes mellitus and chronic kidney disease. Physical examination revealed left sided peripheral facial paralysis and in otoscopy the left auditory canal was markedly inflamed, swollen and had purulent discharge due to chronic otitis media. Antibiotic therapy and oral valacyclovir were given to the patient. He underwent to facial nerve decompression operation. Tissue biopsies were taken during operation and histopathological examination demonstrated the branching septate hyphae of *Aspergillus* spp. The patient was referred to our clinic for medical treatment. In laboratory tests white blood cell count: 7,010/mm<sup>3</sup>. erythrocyte sedimentation rate: 96 mm/h and, C-reactive protein: 19 mg/l. In the fungal culture of the external auditory canal discharge *Aspergillus* spp wasn't determined. Galactomannan antigen test was negative.

Intravenous liposomal amphotericin B (3 mg/kg/day) was started. A week after antifungal therapy, the complaints and otoscopic findings of the patient recovered. liposomal amphotericin B therapy continued for three weeks and he discharged with oral voriconazole (4mg/kg/bid) therapy. Treatment had given for three months. Facial nerve paralysis is continue as asequela. Antifungal therapy is planning to complete in 6 months.



Computed Tomography finding: indicate the smooth tissue inside mastoidectomy area in the third month of treatment

## Conclusion

The most important risk factor for chronic otitis media due to fungal agents, is immune suppression, like malignancies, immunosuppressive therapy, diabetes mellitus, chronic kidney disease or malnutrition. These medical conditions can alter host-defense mechanisms as seen in our patient. Invasive aspergillosis in immunocompromised patients might cause a wide spectrum of clinical presentations, ranging from local to life-threatening infections. Usually, surgical debridement is required and the prognosis is better with early treatment. In case of complicated chronic otitis media in immunocompromised patients, *Aspergillus* spp should be kept in mind as possible causative microorganisms.