عنوان مقاله:

Evaluation of lacrimal drainage system by radionuclide dacryoscintigraphy in patients with epiphora

محل انتشار:

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نویسندگان:

Sagili Chandrasekhara Reddy - *Department of Ophthalmology, School of Medical Sciences, University Sains Malaysia, Kubang Kerian, Kelantan, Malaysia |Department of Ophthalmology, Faculty of Medicine and Defence Health, National Defence University of Malaysia, Kem*

Ahmad Zakaria - *Department of Nuclear Medicine, Radiotherapy and Oncology, School of Medical Sciences, University Sains Malaysia, Kubang Kerian, Kelantan, Malaysia*

Venkata Muralikrishna Bhavaraju - *Department of Nuclear Medicine, Radiotherapy and Oncology, School of Medical Sciences, University Sains Malaysia, Kubang Kerian, Kelantan, Malaysia*

خلاصه مقاله:

Introduction: This study was done to determine the site of obstruction in lacrimal drainage system in Asian patients suffering from epiphora and to determine the transit time taken for the tracer material to reach the lacrimal sac and the nasal cavity. Methods:Dacryoscintigraphy was performed using radionuclide technetium-99m pertechnetate (99mTc) in 34 patients suffering from unilateral or bilateral epiphora and in 3 cases of post-operative dacryocystorhinostomy. The site of obstruction was noted during the dynamic scintigraphy procedure. The time taken for the tracer material to reach the lacrimal sac in all the eyes and the nasal cavity in the eyes with patency of nasolacrimal duct was determined. Results:Complete obstruction of nasolacrimal duct (NLD) was noted in all 22 unilateral cases. However, in 4 of the contralateral asymptomatic eyes in these patients complete obstruction of NLD was detected. Out of 12 bilateral cases, complete obstruction of NLD was noted in both eyes in 4 cases, and in one eye only in 8 cases. There was partial obstruction of NLD in the other eye in these 8 patients. The mean transit time taken for the tracer material to reach the lacrimal sac was 8 seconds (range 5 – 14 seconds) and to the nasal cavity was 6 minutes 20 seconds (range 2 minutes 16 seconds – 12 minutes). Conclusion:This non-invasive procedure helps in the diagnosis of partial obstruction of NLD which can be missed by syringing procedure. The time taken for the tears to drain into the nasal .cavity can also be measured in eyes with patent nasolacrimal duct by this procedure

کلمات کلیدی:

Technetium-99m, Epiphora, Dacryoscintigraphy, Nasolacrimal duct obstruction, Dacryocystorhinostomy