Eye see cam Video -Oculography (VOG): A New Method for Diagnosis and Following of NPC Patients


Niemann-pick C disease is a panethnic autosomal recessive neurodegenerative disease with a minimal incidence of 1/120000 to 1/150000 live births. This disease has extremely heterogeneous clinical presentations. Specific signs and symptoms of NPC disease Categorize in three main groups: visceral, neurological and psychiatric symptoms. Vertical Supranuclear Gaze Palsy (VSGP) is one of key neurological sign in the clinical diagnostic process. It is seen in greater than 95% of NPC patients. At first downward then upward vision direction is involved. Pathological anatomy of the VSGP is the upper brainstem (riMLF location). Eye See Cam VOG provides a measurement for quantifying eye movements. This Device includes a light weight goggles with a camera, a measurement unit and a battery- driven laptop and works as a mobile setup. Therefore it can be applied at the test person’s bedside or in the emergency room. The physician assesses Human vestibular and ocular- motor function in a few minutes. During the test the patient must fix and follow a specific Light spot on the desktop that moves in vertical and horizontal directions to assess the saccadic and smooth pursuit eye movements. The information that have been obtained by a professional, are analyzed to detect ocular motor disorders. At present we instructed the eye see cam -VOG in our hospital to evaluate the VSGP in NPC patients that is valuable in both early diagnosis and follow up of this key sign in NPC.

Keywords: Eye see cam-VOG; NPC; New method; Diagnosis