CASE REPORT

Sensory Neural Hearing loss(SNHL) in case of Hyperbilirubinemia and intake of antimalarial drug(Quinine) in adult patient.

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ABSTRACT

Introduction: The auditory pathway is one of the most susceptible parts of Central Nervous System to virulent agents. The criteria for SNHL is hearing loss of 30dB .The patients of Severe hyperbilirubinemia and receipients of anti-malarial drugs may be more susceptible to SNHL. SNHL may have multiple etiologies for example damage to vestibulocochlear cranial nerve ,hair cells of organ of corti of inner ear and central processing centres of brain.Ototoxic effects of anti-malarial drug like Quinone(prescribed as prophylactic measure) may also have attributed or contributed to SNHL

Case Report:A 19 yr old female presented with symptoms like icteric skin and sclerae,upper epigastric pain,fatigue ,malaise.Upon Ultrasonography it was revealed that the patient has hepatomegaly ,mild splenomegaly and the gall bladder had an edematous wall.These along with the lab findings supported the diagnosis for hyperbilirubinemia secondary to acute viral hepatitis. The patient is treated for viral hepatitis and hyperbilirubinemia.Also the patient was prescribed Quinone drug as a prophylaxis for malaria due to severely effected liver. The patient then in 5 days starts complaining for of signs of Hearing Loss along with Tinnitus and is followed up by certified audiologist. The patient presents with more than 90dB audiometric threshold in the right ear representing profound hearing loss and 40-60dB audiometric threshold representing moderate hearing loss over a period of 2 days and Tinnitus in the left ear and and is diagnosed with SNHL along with Tinnitus in left ear impairing normal hearing in left ear and causing permanent deafness in the right ear.The patient also revealed that she had mild tinnitus 1 month before the hopitalisation but it diminished soon.

CONCLUSION:

Over the years the ototoxic effects of anti-malarial drugs like quinone have been reported . Reports of asssociation of hyperbilirubinemia and sensorineural hearing have been reported too but the incidence is oberved rarely and mostly in infants .the patient needs to be treated based on clinical judgment by a certified audiologist.The physicians must carefully watch out for progression of ototoxic effects of Quinone given during prophylaxis as well as treatment and the hearing levels should be examined in patients with severe hyperbilirubinemia as well. Both factors are known to be associated with SNHL and are contraindicative for patients with any signs of tinnitus or hearing problems.