

Summary of guidelines for aetiological investigation into progressive permanent childhood hearing impairment

Level 1 investigations: Recommended for all children with progressive PCHL

- 1) **Clinical history:** [Recommendation D]
- 2) **Clinical examination:** [Recommendation D]
- 3) **MRI IAM & brain / CT Petrous Temporal:** [Recommendation C]
- 4) **CMV testing:** [14, 24-34] [Recommendation B]
- 5) **Family audiograms:** [14, 35,36] [Recommendation D]
- 6) **Ophthalmic assessment:** [Recommendation B]
- 7) **Urine examination (labstix) for microscopic haematuria and proteinuria:** [Recommendation D]
- 8) **Genetic tests: GJB2/GJB6 [Connexin 26/30] and for m.1555A>G** [Recommendation B]
- 9) **Serology for other infections** [Recommendation C/D]

Congenital toxoplasmosis
Congenital Rubella
Congenital Syphilis
Congenital HIV

- 10) **Investigation for autoimmune diseases** [Recommendation C/D]

Level 2 investigations: for selected children depending on clinical features

- 1) **Haematology and Biochemistry:** [Recommendation D]
- 2) **Renal ultrasound:** [Recommendation D]
- 3) **Metabolic Screen on blood and urine:** [Recommendation D]
- 4) **Lyme disease serology:** [Recommendation D]
- 6) **CGH microarray:** [Recommendation D]
- 7) **Further genetic testing:** [SLC26A4, BOR, Usher, gene panel, whole genome sequencing] [Recommendation C/D]
- 8) **Referral to Clinical Geneticist:**
- 9) **Vestibular investigations:** [Recommendation C/D]
- 10) **Referral to Paediatric Rheumatologist/Immunologist**