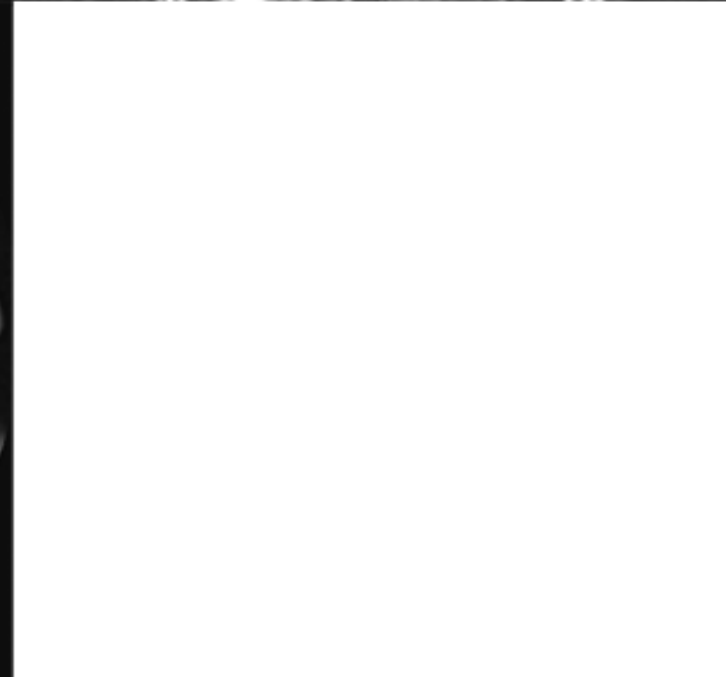
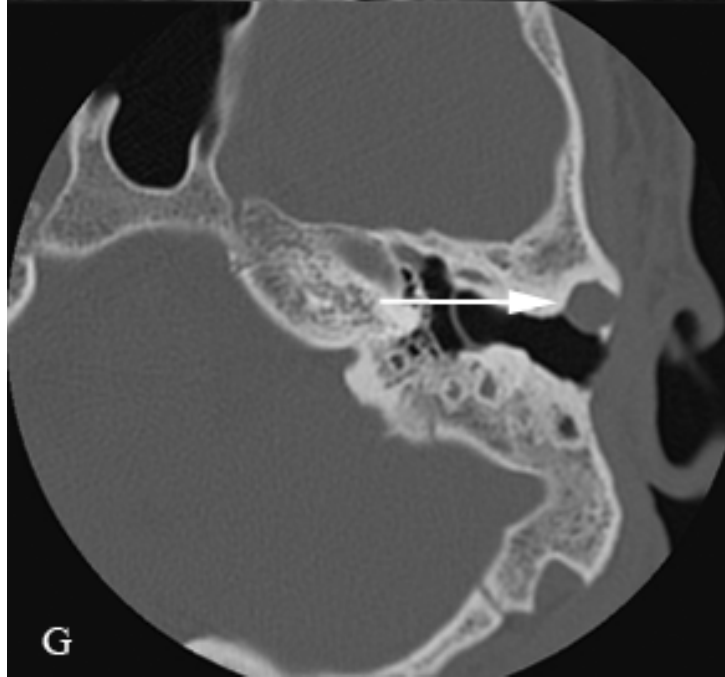
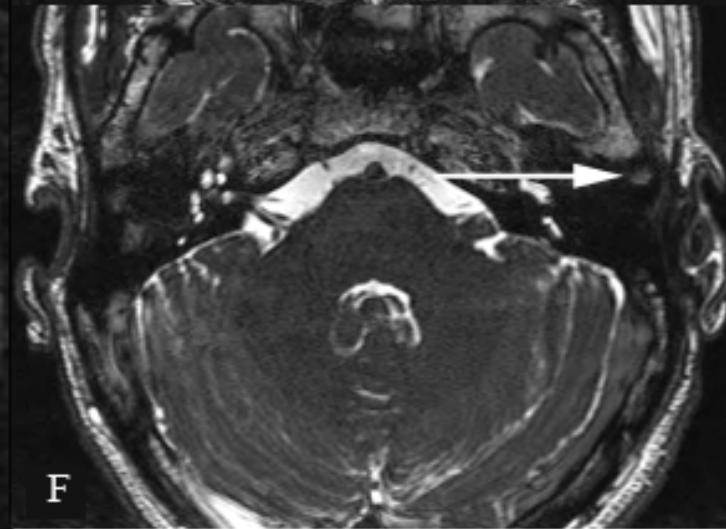
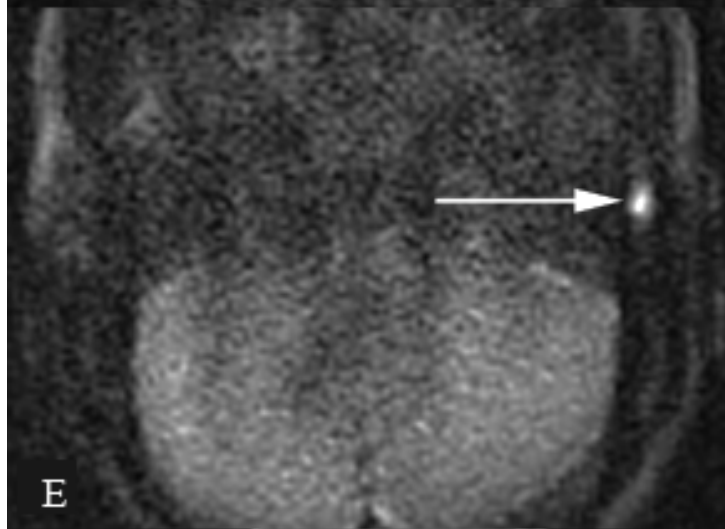
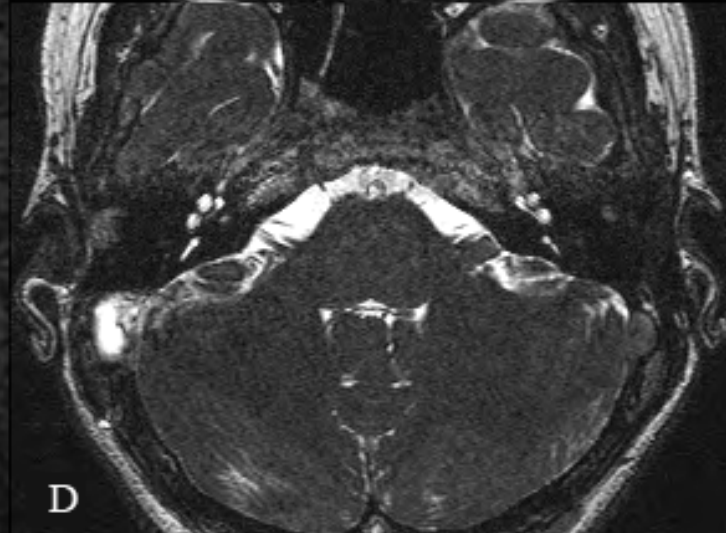
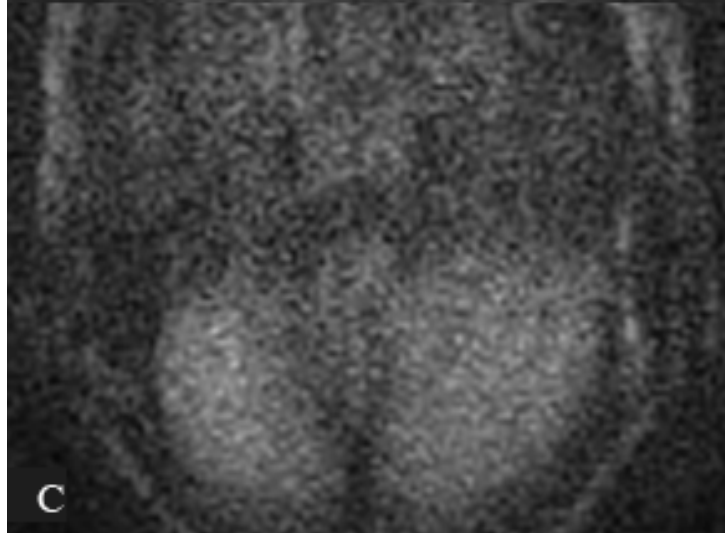
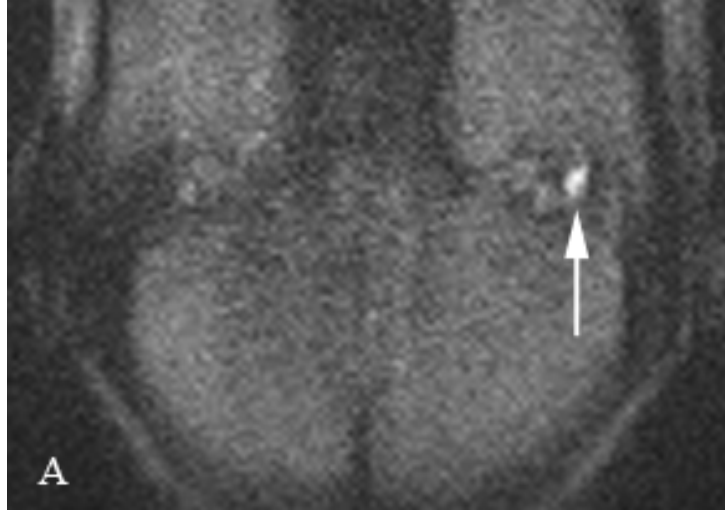


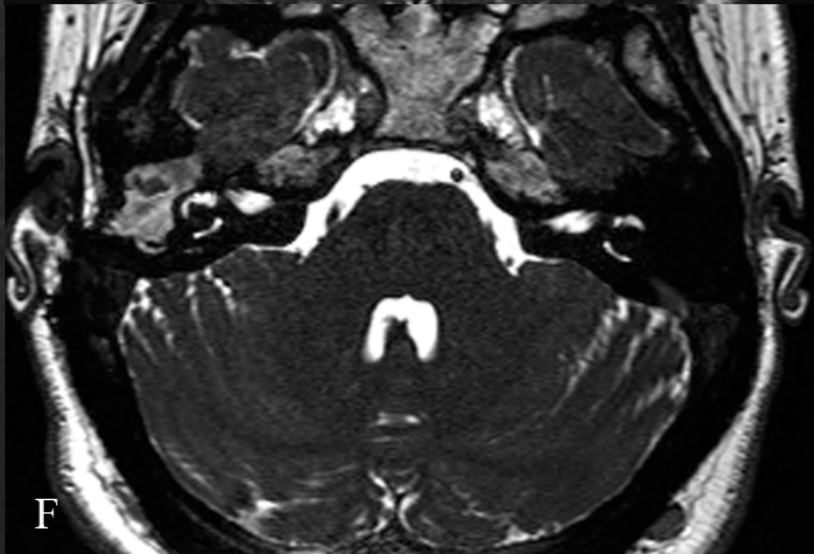
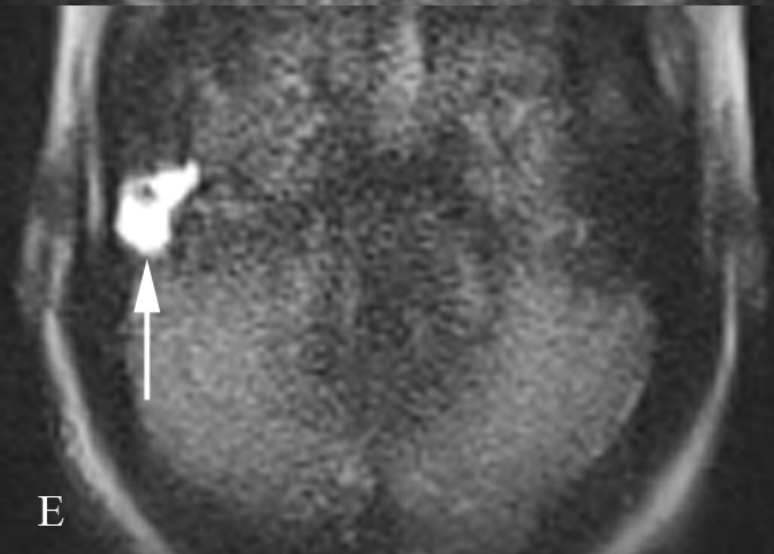
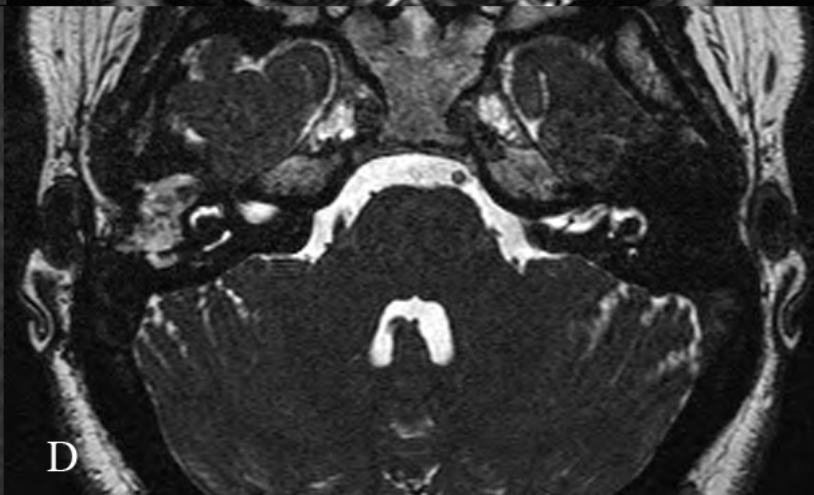
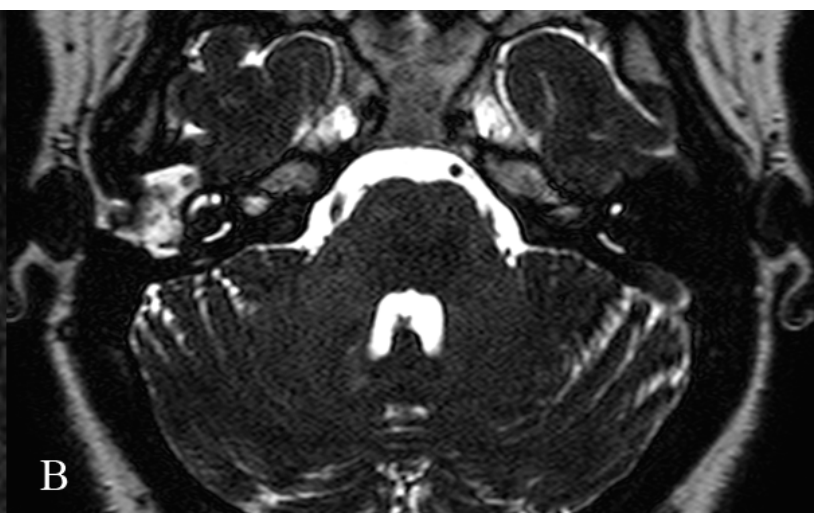
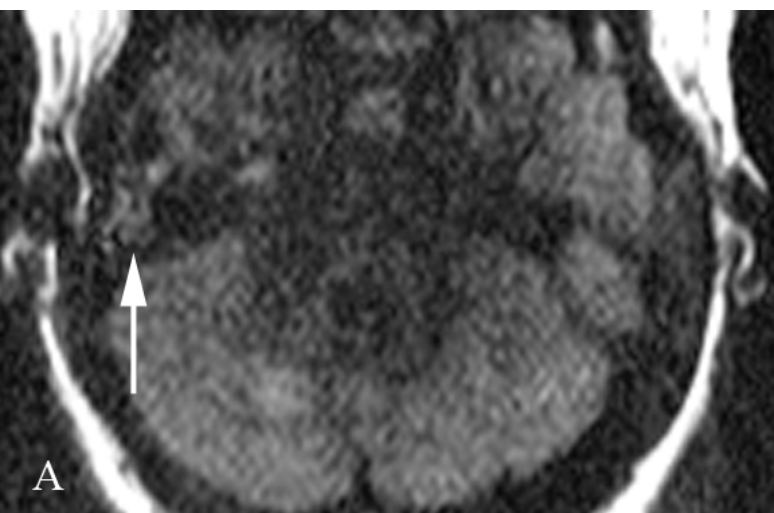
Participants (N°)	Sex (M/F)	Age (Years)	Side (R/L)	Initial localization and extent (STAM classification)	Surgical technique (CWU/CW D)	Initial surgery – MRI 1 (Months)	Initial surgery– MRI 2 (Months)	Initial surgery– MRI 3 (Months)	Initial surgery– MRI 4 (Months)	Initial surgery– MRI 5 (Months)	Revision surgery (Y/N)	Grounds for surgery	Initial surgery– revision surgery (Months)	Residual cholesteatoma (Y/N) and size (mm, if applicable)
1	M	14	L	A/T/S2 - stage 2	CWU	14	25				Y	Residual suspicion	28	Y (8×5)
2	F	16	R	A/T - stage 2	CWU	32	40	85			Y	Residual suspicion	85	Y (20×11)
3	M	12	R	T - stage 1	CWU	16	28	69						N
4	F	7	L	T - stage 1	CWU	14	27	43	83	144				N
5	F	50	R	A/M - stage 2	CWU	10	35	46			Y	Conductive hearing loss	48	N
6	F	44	L	T/M - stage 2	CWD	25	119	147	198					N
7	M	35	L	A - stage 1	CWU	20	52				Y	Residual suspicion	58	Y (11×10)
8	F	38	L	S1/T/A - stage 2	CWD	29	68							N
9	M	13	R	T/S2 - stage 2	CWU	9	20							N
10	M	79	L	T - stage 1	CWU	21	29	45	64					N
11	M	6	L	S1/T/A - stage 2	CWU	13	37				Y	Residual suspicion	37	N
12	M	23	L	A/T/M - stage 2	CWU	15	45							N
13	M	15	L	S2/ M - stage 2	CWU	15	37	69			Y	Residual suspicion	76	Y (8×6)
14	F	16	R	S2/ M - stage 2	CWU	16	50				Y	Residual suspicion	52	N
15	M	45	R	A/T/M - stage 2	CWU	24	45	56			Y	Residual suspicion	58	Y (9×7)
16	M	74	L	A - stage 1	CWU	12	39				Y	Residual suspicion	39	Y (6×5)
17	F	27	R	A - stage 1	CWU	10	29	54			Y	Residual suspicion	57	Y (8×4)

Table 1: Clinical, MRI, and surgical findings. F: female; M: male; L: left; R: right; N: no; Y: yes; STAM Classification (EAONO 2016): S1: protympanum; S2: retrotympanum; T: mesotympanum; A: attical; M: mastoid; stage 1: one location; stage 2: two locations; CWU: canal wall-up; CWD: canal wall-down with reconstruction



Supplemental material 1 : Example of MRI follow-up of patient 13 (male, 15 years-old, with history of left-sided cholesteatoma)

A and B: non-EPI DWI showing restriction (A, arrow) in the epitympanum with a hyperintense signal on axial T2 imaging (B, arrow) prior to initial surgery. C, D: DWI and T2 imaging performed 15 months after initial surgery indicating a low risk of residual cholesteatoma. E, F and G: Axial DWI (E,F) and CT scan (G) performed 69 months after the initial surgery providing evidence of a residual cholesteatoma, measured 8x6mm (arrows).



Supplemental material 2 : Example of MRI imaging follow-up of patient 2 (female, 16 years-old, with history of right-sided cholesteatoma)

A, B and C, D: Axial DWI and T2 imaging performed 32 months (A, B) and 40 months (C, D) after the initial surgery. With no significant DWI restriction the imaging findings do not provide evidence of a residual cholesteatoma (A, C, arrows) despite a hyperintense signal in the mastoid cavity on T2 weighted imaging (B, D). E, F: Axial DWI and T2 MRI performed 85 months after the surgery showing evidence of residual cholesteatoma, measured 20x11mm (arrow).