1 Patient Information

1 PATIENT DETAILS

Name
Arthur G. Pemberton

Date of Service
05/06/2026

DOB
03/07/1958

Provider
Dr. Caroline M. Wu, MD — Otolaryngology / Neurotology

Age / Sex
68 / Male

MRN
ENT-2026-0628

Visit Type
Hearing Loss Evaluation

Affected Ear / Laterality
Right > Left — Bilateral but Asymmetric SNHL

Referral Source
Dr. Harold Greene, MD — Internal Medicine / PCP

CC Chief Complaint

2 PRIMARY HEARING-RELATED CONCERN

Mr. Pemberton is a 68-year-old male retired US Army veteran presenting with a 3-year history of gradually progressive bilateral hearing loss, right worse than left, associated with constant high-pitched right-sided tinnitus, and episodic right aural fullness. He states: 'I've been struggling to hear conversations, especially in noisy places. My right ear is much worse than my left — my wife says I keep asking her to repeat herself. I also have a constant ringing in my right ear that started about 3 years ago.' His PCP referred him after a formal audiogram performed in the PCP's office 2 weeks ago demonstrated significant asymmetric sensorineural hearing loss (right 55 dB PTA, left 28 dB PTA) with right-sided low word recognition — prompting concern for retrocochlear pathology.

S Subjective

3 PATIENT-REPORTED HEARING SYMPTOMS, RISK FACTORS & PRIOR EVALUATION

3a ONSET & COURSE

Gradual onset approximately 3 years ago (2023) — patient initially noticed difficulty hearing television and phone conversations on the right side. Progressive decline without episodes of sudden hearing loss. No fluctuation — steady progressive decline. Right ear clearly worse and deteriorating more rapidly than left. He reports that 6 months ago he was able to hear his wife from another room on the right; now he cannot hear her clearly even face-to-face in a quiet room unless she is on his left side. No sudden or stepwise changes. No periods of improvement.

3b LATERALITY & PATTERN

Laterality
RIGHT >> LEFT — significantly asymmetric. Right: unable to follow conversation in noise. Left: mild difficulty in noisy environments.

Difficulty in Noise / Discrimination
Severe in noise on right. Mild in noise on left. Right: notable difficulty understanding speech even in quiet — not just volume but clarity.

Asymmetry
Clearly worse right. Phone: uses left ear exclusively. Right ear: not functional for phone use.

3c ASSOCIATED EAR SYMPTOMS

RIGHT EAR: Constant high-pitched tinnitus (described as '4000 Hz pure tone' — patient is very precise due to military technical background). Severity 7/10, present 24 hours/day. Significantly disrupting sleep — uses white noise machine. Rated as the most bothersome symptom by the patient. Episodic right aural fullness — approximately 4–5 episodes over the past year, each lasting 2–4 hours. No right otalgia or otorrhea. No autophony. No popping or pressure relief with swallowing. LEFT EAR: Mild tinnitus (intermittent, lower pitched, 2–3 on severity scale). No aural fullness. No otalgia or otorrhea.

3d NOISE / TRAUMA EXPOSURE

US Army veteran — 22-year active duty service (1980–2002). Primary Military Occupational Specialty (MOS): Field Artillery — significant exposure to artillery fire and heavy weapons without consistent hearing protection during early career (1980s). Multiple deployments including Gulf War (1991). Post-military: 10 years as high school band director (2002–2012) — occupational noise exposure to music. Currently retired. No blast exposure. No barotrauma or head trauma. No recreational shooting or loud music exposure currently. Veterans Administration hearing evaluation: completed in 2018 — bilateral high-frequency SNHL documented at that time; rated for hearing disability by VA.

3e INFECTION / MEDICAL HISTORY

No history of otitis media beyond one episode in childhood (age 8). No prior ear surgery. No TM perforation. No cholesteatoma. Hypertension — lisinopril 10 mg daily (well-controlled, BP 128/74 today). Hyperlipidemia — atorvastatin 40 mg. Type 2 DM — metformin 500 mg BID, well-controlled (HbA1c 6.9%). No autoimmune disease. No neurofibromatosis or family history of acoustic neuroma. No meningitis or encephalitis. No stroke or cerebrovascular disease. No prior neurotologic evaluation.

3f MEDICATION / OTOTOXIC EXPOSURE

Current medications: lisinopril, atorvastatin, metformin, aspirin 81 mg. No aminoglycosides. No prior chemotherapy. No loop diuretics. Aspirin 81 mg daily (low-dose — negligible ototoxic risk at this dose). No ototoxic exposures identified. VA had documented baseline hearing loss in 2018 — attributing the initial loss to noise exposure; the progressive and asymmetric pattern since 2018 is the current concern.

3g FUNCTIONAL IMPACT

Hearing loss has significantly impaired Mr. Pemberton's quality of life: Cannot follow group conversations or dinner table discussions. Cannot use phone on right ear. Watching television requires volume at 85% (wife complains it is too loud). Difficulty at church, restaurants, and social gatherings — increasingly avoids these settings. Retired, so work impact is minimal; however, he participates in a woodworking club and reports inability to hear fellow club members. Self-reports PHQ-2 score of 1 (no significant depression). Tinnitus is the most functionally disabling symptom — severely disrupting sleep.

3h PRIOR EVALUATION & TREATMENT

VA hearing evaluation (2018): bilateral high-frequency SNHL documented. No hearing aids fitted at that time per patient report — he declined at that time. PCP audiogram (04/22/2026): Right PTA 55 dB HL (moderate-severe SNHL), Left PTA 28 dB HL (mild SNHL); right word recognition 52% (severely impaired — prompting retrocochlear concern and referral). No prior MRI. No prior hearing aids. No prior tinnitus therapy. No prior ENT evaluation for these symptoms.

3i PERTINENT NEGATIVES

Denies sudden sensorineural hearing loss (gradual, not sudden). Denies severe vertigo or imbalance (episodic mild unsteadiness noted separately but no Menière-pattern attacks). Denies facial weakness or numbness. Denies neurologic deficits. Denies severe otalgia or mastoid swelling. Denies fever or otorrhea. Denies diplopia, dysphagia, or other cranial nerve symptoms. Denies family history of acoustic neuroma or neurofibromatosis type 2.

ROS ENT Review of Systems

4 PERTINENT POSITIVES & NEGATIVES

- **Hearing loss:** POSITIVE — bilateral, right >> left; 3 years, progressive
- **Aural fullness / ear pressure:** POSITIVE — right episodic, 4–5 episodes/year, 2–4 hours each
- **Otorrhea:** Denied
- **Noise exposure:** POSITIVE — significant military (22 yr artillery) + occupational (10 yr band director)
- **Neurologic symptoms:** Denied beyond hearing and tinnitus
- **Tinnitus:** POSITIVE — right constant high-pitched 7/10; left mild intermittent
- **Otalgia:** Denied
- **Dizziness / vertigo / imbalance:** Episodic mild unsteadiness — not frank vertigo, not imbalance with falls
- **Facial weakness / numbness:** Denied — no CN VII or CN V symptoms
- **Fever / infection:** Denied

O Objective

5 MEASURABLE & OBSERVED OTOLOGIC FINDINGS

V VITAL SIGNS

Temperature
98.2°F

Blood Pressure
128/74 mmHg

Heart Rate
70 bpm

Respiratory Rate
14 breaths/min

Oxygen Saturation
98% on room air

Height / Weight
5'11" / 194 lbs (BMI 27.1)

Pain Score
0/10; tinnitus distress rated 7/10

5a GENERAL APPEARANCE

Well-appearing, alert 68-year-old male. No hearing aids in use. Speaks clearly and articulately. Leans slightly toward examiner on his left side during conversation — compensatory behavior for right-sided hearing loss. No acute distress. Cooperative and very engaged in the evaluation — brings detailed notes about his symptoms, military service dates, and noise exposure history.

5b HEAD & FACE

Normocephalic, atraumatic. Facial symmetry intact bilaterally. Facial sensation: intact to light touch V1, V2, V3 bilaterally. Facial nerve function: intact — symmetric smile, brow raise, eye closure (CN VII). No parotid masses. No mastoid tenderness bilaterally. No post-auricular scars.

5c EAR EXAM

RIGHT EAR: External ear — normal pinna, no deformity, no pre/post-auricular masses. External auditory canal: cerumen-free (no cerumen impaction). Tympanic membrane: intact, normal landmarks (cone of light, malleus, pars flaccida, pars tensa all well visualized). NO effusion, NO retraction, NO perforation. TM mobility: NORMAL on pneumatic otoscopy (rules out ETD as cause of asymmetric HL). No cholesteatoma concern — attic and posterior TM intact. LEFT EAR: External ear: normal. EAC: clear. TM: intact, normal mobility, no abnormalities. BILATERAL: No mastoid tenderness. No pre-auricular sinus or pit. No external ear lesions or masses.

5d NASAL / ORAL / NECK

Nasal Exam
Normal — no obstruction, clear mucosa, septum midline

Oral Cavity / Oropharynx
Normal — no lesions, tonsils grade 1 bilateral

Neck
No palpable cervical lymphadenopathy. No masses. Thyroid: normal size, no nodules. No jugular foramen masses palpable.

5e NEUROLOGICAL

CRANIAL NERVE EXAMINATION: CN V: intact trigeminal sensation bilateral. CN VII: symmetric facial movement — intact. CN VIII: Hearing grossly reduced right (whispered voice not heard right at 2 feet; heard left at 4 feet). CN IX, X, XI, XII: intact — symmetric palate elevation, gag present, shoulder shrug 5/5, tongue midline. No nystagmus at rest. Coordination: finger-nose-finger intact bilaterally. No gait ataxia or Romberg positivity. No pronator drift. Neurologic examination otherwise intact.

PP Procedures Performed

6 OTOLOGIC PROCEDURES THIS VISIT

TUNING FORK TESTING — documented as a separately performed and interpreted diagnostic procedure: Indication: Differentiation of conductive vs sensorineural hearing loss and lateralization of hearing loss. Technique: 512 Hz tuning fork activated to a standard level. WEBER TEST: Tuning fork placed on the vertex of the skull. RESULT: Weber lateralizes strongly to the LEFT ear. Interpretation: In unilateral SNHL (right worse), Weber lateralizes to the BETTER ear (left) — this is consistent with right-sided sensorineural hearing loss (not conductive). If conductive, Weber would lateralize to the worse ear. This result supports right SNHL as the primary diagnosis. RINNE TEST (Right): 512 Hz tuning fork placed on right mastoid until no longer heard, then moved to right pinna. RESULT: Right AC > BC (positive Rinne right). Interpretation: Consistent with SNHL or normal hearing right — rules out right conductive hearing loss. RINNE TEST (Left): RESULT: Left AC > BC (positive Rinne left). Interpretation: Consistent with SNHL or normal hearing left. COMBINED INTERPRETATION: Weber lateralizes left + Right Rinne positive = Right sensorineural hearing loss confirmed. Conductive component excluded bilaterally. Patient tolerated all testing without discomfort.

L Audiology / Diagnostic Results

7 HEARING-SPECIFIC DATA

7a AUDIOGRAM (PCP OFFICE, 04/22/2026 — REVIEWED TODAY)

Type of Hearing Loss
BILATERAL SENSORINEURAL — Right severe, Left mild-moderate. No air-bone gap bilaterally.

Degree / Laterality
Right: 55 dB PTA (moderate-severe SNHL). Left: 28 dB PTA (mild SNHL).

Air-Bone Gap
No ABG bilaterally — pure sensorineural loss confirmed

Speech Reception Threshold (SRT)
Right SRT: 58 dB HL. Left SRT: 30 dB HL.

Word Recognition Score (WRS)
RIGHT WRS: 52% at 90 dB (severely impaired — rollover phenomenon present; WRS worse at higher presentation levels, suggesting retrocochlear involvement). LEFT WRS: 88% at 70 dB (good — age-appropriate).

Asymmetry
RIGHT >> LEFT: 27 dB PTA asymmetry (>15 dB asymmetry is threshold for retrocochlear workup per AAO-HNS guidelines — strongly positive for workup indication)

7b TYMPANOMETRY (PCP OFFICE, 04/22/2026)

Type
Bilateral Type A tympanograms — normal compliance and middle ear pressure bilaterally

Middle Ear Pressure / Compliance
Normal bilateral — no ETD, no effusion, no hypercompliance

Effusion Concern
No effusion identified on tympanometry or otoscopy

7c TUNING FORK TESTING (TODAY — SEE PROCEDURES SECTION)

Weber
Lateralizes LEFT — consistent with right SNHL

Rinne (Right)
AC > BC (positive) — SNHL pattern

Rinne (Left)
AC > BC (positive) — SNHL or normal

7d IMAGING & LABORATORY STUDIES

IMAGING ORDERED TODAY: MRI BRAIN AND INTERNAL AUDITORY CANALS (IAC) WITH AND WITHOUT GADOLINIUM CONTRAST: Indication: Asymmetric SNHL (right 55 dB vs left 28 dB, 27 dB asymmetry) + low right word recognition score (52%) with rollover phenomenon = retrocochlear pathology concern (acoustic neuroma / vestibular schwannoma, other CPA mass). Asymmetric SNHL >15 dB PTA difference is an absolute indication for MRI IAC per current AAO-HNS clinical practice guidelines. MRI scheduled 05/09/2026. Audiometry with acoustic reflexes and otoacoustic emissions (OAEs): ordered today through audiology (Dr. Patricia Lee, AuD) for more complete retrocochlear workup and cochlear function assessment. LABORATORY: No labs ordered today. Prior labs (from PCP) reviewed: HbA1c 6.9%, BMP WNL, thyroid TSH 2.1 — no metabolic cause identified.

7e PRIOR RECORDS REVIEWED

VA audiogram (2018): Bilateral high-frequency SNHL documented — right worse than left at that time (right PTA approximately 38 dB, left PTA approximately 22 dB in 2018 vs. right 55 dB, left 28 dB today). INTERVAL PROGRESSION: Right ear has deteriorated 17 dB PTA in 8 years; left ear 6 dB PTA in 8 years — the asymmetric rate of progression in the right ear is a significant concern and strengthens the retrocochlear workup indication.

A Assessment

8 HEARING LOSS CLINICAL INTERPRETATION

Mr. Pemberton is a 68-year-old male veteran presenting with ASYMMETRIC BILATERAL SENSORINEURAL HEARING LOSS, right significantly worse than left (55 dB vs 28 dB PTA), with associated constant right-sided high-pitched tinnitus and episodic right aural fullness. The audiologic and clinical picture raises two concurrent clinical concerns requiring distinct management tracks: (1) RETROCOCHLEAR PATHOLOGY CONCERN: The combination of (a) significant hearing asymmetry (27 dB PTA difference, threshold >15 dB), (b) severely impaired right word recognition score (52%) with rollover phenomenon, (c) Weber lateralizing to the left, (d) episodic right aural fullness, and (e) asymmetric rate of progression over 8 years creates a compelling indication for MRI IAC with gadolinium to exclude vestibular schwannoma (acoustic neuroma) or other CPA/IAC mass. While noise-induced hearing loss (NIHL) is the most likely etiology given his extensive military and occupational noise exposure history, NIHL does not cause this degree of word recognition impairment or asymmetry in isolation — a retrocochlear component must be excluded. (2) BILATERAL NOISE-INDUCED + AGE-RELATED SNHL: The audiometric pattern (high-frequency SNHL, bilaterally, worse right, in a 68-year-old veteran with 22 years of military noise exposure + 10 years of occupational music exposure) is entirely consistent with NIHL + presbycusis. The right ear dominant pattern is consistent with right-dominant noise exposure (right-handed shooter — right ear more proximal to weapon muzzle blast). The left ear has milder but real SNHL that also warrants audiologic management. HEARING AID CANDIDACY: Mr. Pemberton is an excellent candidate for bilateral hearing aids — particularly right ear amplification to address speech understanding deficits. Cochlear implant evaluation not yet indicated (right WRS 52% is below CI threshold of <50% in the ear to be implanted, but this will be reassessed after MRI results). TINNITUS: Right-sided tinnitus is constant and severely impacting sleep — tinnitus retraining therapy (TRT) and sound therapy referral warranted after MRI clears retrocochlear pathology.

P Plan

9 HEARING LOSS MANAGEMENT

9a DIAGNOSTICS & TESTING

1. MRI brain and IAC with and without gadolinium — scheduled 05/09/2026 (urgent, retrocochlear workup). 2. Comprehensive audiometry with acoustic reflex testing (stapedial reflexes) and otoacoustic emissions (OAEs) — ordered, audiology appointment 05/08/2026 (Dr. Patricia Lee, AuD). Acoustic reflexes and OAE results will provide additional retrocochlear data. 3. Repeat audiogram at 6 months post-hearing-aid fitting to monitor progression.

9b MEDICAL TREATMENT

No medical therapy indicated for stable SNHL at this time. No steroids (no sudden SNHL component identified). Diabetes and hypertension management optimized — vascular risk factors for SNHL should remain well-controlled (BP 128/74, HbA1c 6.9% — both adequate). Aspirin 81 mg continued — no ototoxic concern at this dose.

9c HEARING REHABILITATION

HEARING AIDS: Bilateral hearing aid evaluation referral placed to Dr. Patricia Lee, AuD. Right ear: requires significant amplification (55 dB SNHL) — will benefit from premium behind-the-ear (BTE) or receiver-in-canal (RIC) hearing aid with directional microphone technology and noise suppression features. Left ear: 28 dB SNHL — mild hearing aid recommended for binaural benefit. TINNITUS THERAPY: Tinnitus management counseling initiated today. Tinnitus retraining therapy (TRT) or cognitive behavioral therapy for tinnitus referral placed after MRI clears. Immediate: recommend consistent use of white noise machine at night (already using) and sound enrichment during the day. Sound therapy app options discussed (ReSound Relief, Widex Sound Assist). VA hearing services: recommend coordination with VA audiology for hearing aid benefit coverage — patient has VA hearing disability rating.

9d PATIENT EDUCATION & REFERRALS

1. MRI explanation: Clear explanation provided — asymmetric hearing loss requires imaging to rule out a benign tumor on the hearing nerve; this is routine and does not mean he has cancer. Patient expressed appropriate concern but understood the rationale. 2. Noise protection: Counseled to avoid all further loud noise exposure and to use high-fidelity hearing protection (musician's earplugs, NRR ≥25) in any loud environment. 3. Hearing aid counseling: Explained that hearing aids will not restore normal hearing but significantly improve speech clarity and communication. 4. Warning signs requiring urgent evaluation (same day): sudden further hearing loss, new severe vertigo, new facial weakness — call immediately. 5. VA coordination: Encouraged to contact VA audiology regarding hearing disability rating update and VA hearing aid benefit.

F Follow-Up

10 REASSESSMENT PLAN

Follow-Up Schedule

Audiology (OAEs + acoustic reflexes): 05/08/2026. MRI IAC: 05/09/2026. ENT follow-up to review MRI and audiometry results: 05/14/2026. Hearing aid fitting appointment with Dr. Lee: to be scheduled after MRI clearance. 6-month follow-up audiogram: November 2026.

TIME DOCUMENTATION & BILLING

Total Time
50 minutes

E/M Level
99204 — New patient, moderate-high complexity

Counseling / Coordination Time
18 minutes

Procedure Code(s)
92551 — Tuning fork tests (separately performed and interpreted)

Basis for Billing
Medical Decision Making — High Complexity

Primary ICD-10 Code
H90.3 — Sensorineural hearing loss, bilateral

Secondary ICD-10 Code(s)
H93.11 — Tinnitus, right ear; H83.3x1 — Noise effects on inner ear, right ear; H93.A1 — Aural fullness, right ear; Z87.891 — Personal history of noise exposure

PHYSICIAN NAME, MD	SPECIALTY	DATE	TIME
Caroline M. Wu, MD	MD — Otolaryngology / Neurotology | Fellowship-Trained | Board Certified (ABOto)	05/06/2026, 1:00 PM	