

Popular singing problems

Popular music, musicals, jazz, pop, rock, soul, and others

An orange circle with a slight drop shadow, containing the text "Medical Perspectives of Singing" in white.

**Medical
Perspectives
of Singing**

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Panel at 5-6 PM, Phoniatics 3

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Scope

Medical aspects of voice use in contemporary popular music styles, including pop, rock, jazz, musicals and related commercial genres.

Knowledge base

The presentation combines literature, clinical experience, and connection to a broader book on voice-related biomarkers.

Clinical priority

Move from general voice care toward differentiated, genre-aware medical assessment and treatment planning.

Why popular singing needs a distinct medical approach

Different demands

Popular styles often use high sound pressure levels, amplification, extended non-modal phonation and stylistic effects.

Different contexts

Concerts, touring, studios, social schedules and industry pressure shape risk, treatment timing and recovery decisions.

Different evidence gap

The field remains fragmented across voice medicine, pedagogy, music education, performance practice and vocal science.

Clinical focus expands from “voice problem” to performance

Singer

Technique, symptoms, habits

Genre

Load, style, register

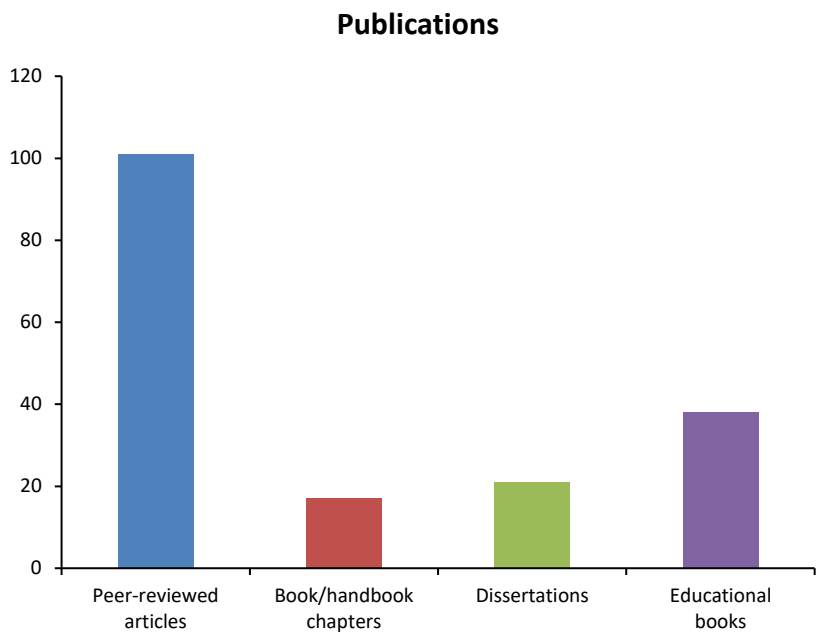
Clinic

Singing pathologies, treatment, follow-up

Industry

Concerts, travel, studios

Systematic mapping review



Observation	Implication
177 publications included (2020-2025)	Evidence base is sizable but uneven
North America dominates	European medical/pedagogical data are less visible
Practical knowledge often in books	Clinical practice may outpace peer-reviewed evidence
Classical tradition still influence the field	Popular singing needs genre-specific concepts

Popular music voice pedagogy articles

Key milestones

- 1985** “Bach to Rock Connection” newspaper column initiates discussion of non-classical styles
- 2008** AATS (American Academy of Teachers of Singing) - position statement supports Contemporary Commercial Music pedagogy
- 2014** NATS (National Association of Teachers of Singing) “So You Want to Sing” series broadens resources for popular styles

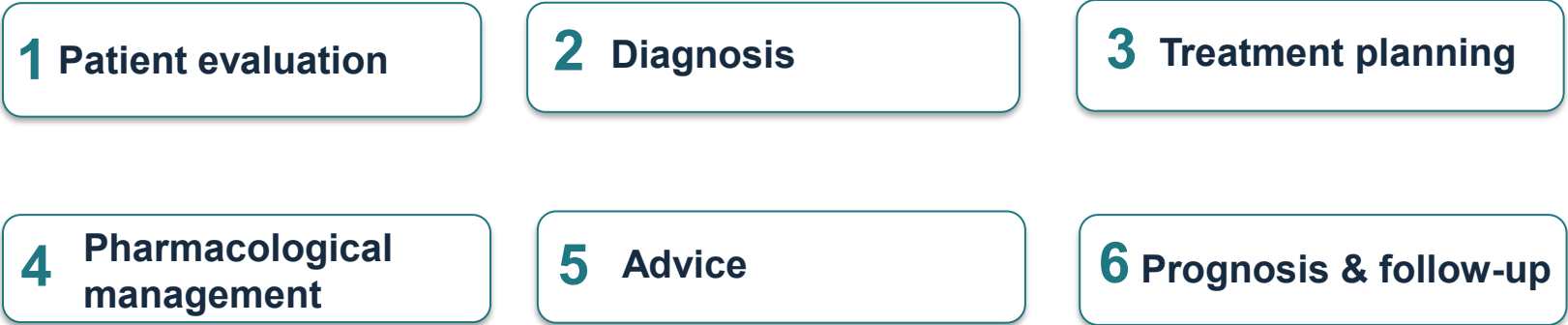
Recent years

Genre-specific knowledge, medical perspectives and biomarker thinking become more relevant

The results show popular voice medicine as a developing field: legitimate, interdisciplinary, but not yet fully standardized.

First medical clinical visit: rank order

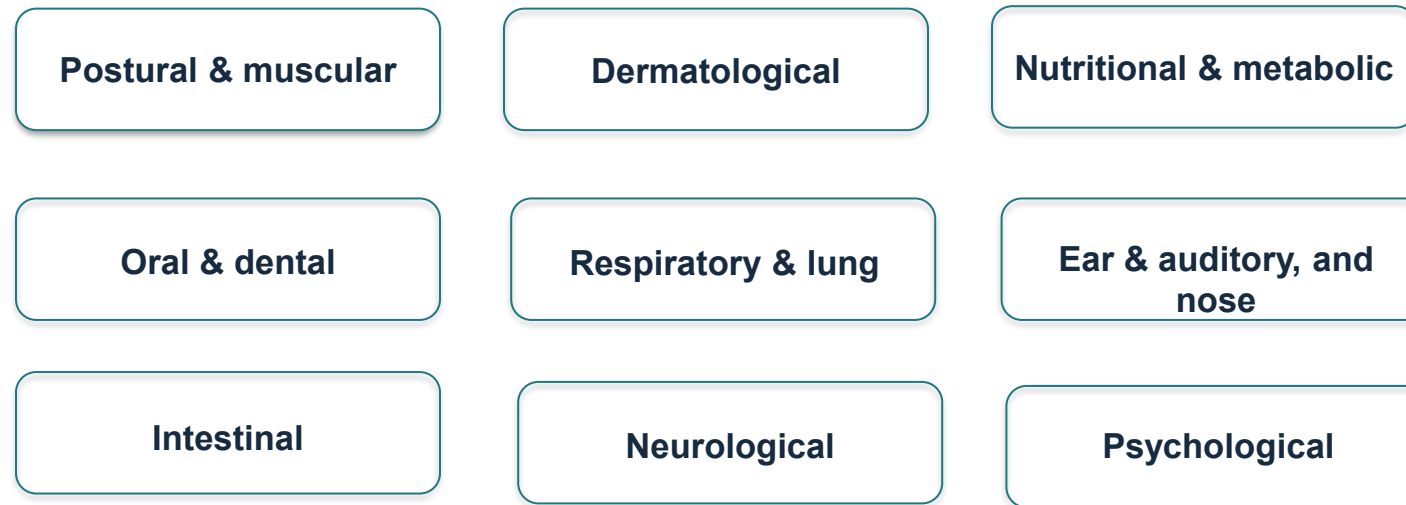
From first contact to follow-up



Case type	Added focus
Acute new case	Correct diagnosis, symptoms, examinations and treatment
Acute recurrent case focus	Lifestyle and repeated triggers
Chronic case with exacerbation focus	Objective findings, prophylaxis and follow-up

General disorders that must be considered

Many singer problems are not purely local laryngeal issues. Broader medical areas may influence performance and recovery.



Especially stress, pain, reduced sleep, lung and upper-airway factors, and hearing should be routinely considered alongside laryngeal findings.

Some local laryngeal problems emphasized

Infection

Viral and bacterial infections require correct diagnosis, treatment timing, voice rest and regeneration strategy.

Allergy

High-speed film/stroboscopy, airflow, and EGG can help fine-diagnose in relapsing or chronic cases.

Reflux

Incidence above 70%. Often unrecognized by singers. High subglottic pressure in falsetto and genre-specific techniques are common triggers. Correct medication dose, concert timing and lifestyle correction all required.

Trauma & pollution

Local irritation or overload may be linked to technique, environment and performance schedules.

These conditions interact with concerts, travel, technique, medication, and the singer's ability to test the voice after treatment.

Reflux: complaints, objective signs and lifestyle correction

Clinical dimension	Specific aspects	Avoid / reduce	Prefer / support
Complaints	Symptoms of pressure in the throat may be present even when the singer is not fully conscious of them	Smoke, caffeine, alcohol	Green vegetables, lean protein
Objective findings	Damage, especially on the arytenoids and the back of the vocal folds, can be quantified with high-speed films or stroboscopy	Strong/spicy food, peppermint	Small meals and hydration
Measures	Voice-related biomarkers help document deviations and treatment effects	Fat food, carbonic acid drinks	No late meals; headboard raised ≥ 30 cm
Treatment	Medication may include acid pump inhibitors, antacids, alginates, H2 antagonists, mucosal protection agents and reflux inhibitors	Tight clothing; weight gain	Maintain stable body weight

Why it matters

Incidence above 70% in popular singers. Singers are often unaware of symptoms, so diagnosis and treatment must be carefully advised. High subglottic pressure in falsetto and style-specific techniques are the main triggers. Biomarker deviations help quantify laryngeal damage and guide dosage, timing around concerts, and lifestyle correction.

Genre-specific risks:

102 popular genres were found in the literature. Rather than treating every genre as medically fixed, the practical focus is on risk patterns.

Risk pattern	Examples	Typical concern
Vocal fatigue	Musical theatre, country, pop	Overload, draining sensation, incorrect technique
Vocal fold hemorrhage	Hard rock, metal	High intensity / phonotrauma
Edema and nodules	Blues, soul, gospel	Tissue swelling, chronic load (long-lasting intensive song)
Reflux-related irritation	Falsetto and some specific technical styles	Subglottic pressure and laryngeal tissue irritation

Pop family
pop, dance pop,
synthpop, indie
(independent) pop

Rock/metal
classic rock, hard rock,
punk, metal

Jazz/blues/soul
jazz, blues, R&B
(Rhythm and Blues),
gospel

**Stage/country/
folk**
musical theatre,
country, folk

**Electronic Dance
Music/Latin/global**
EDM,salsa,reggaeton
(Latin dance music
genre), K-pop, world pop

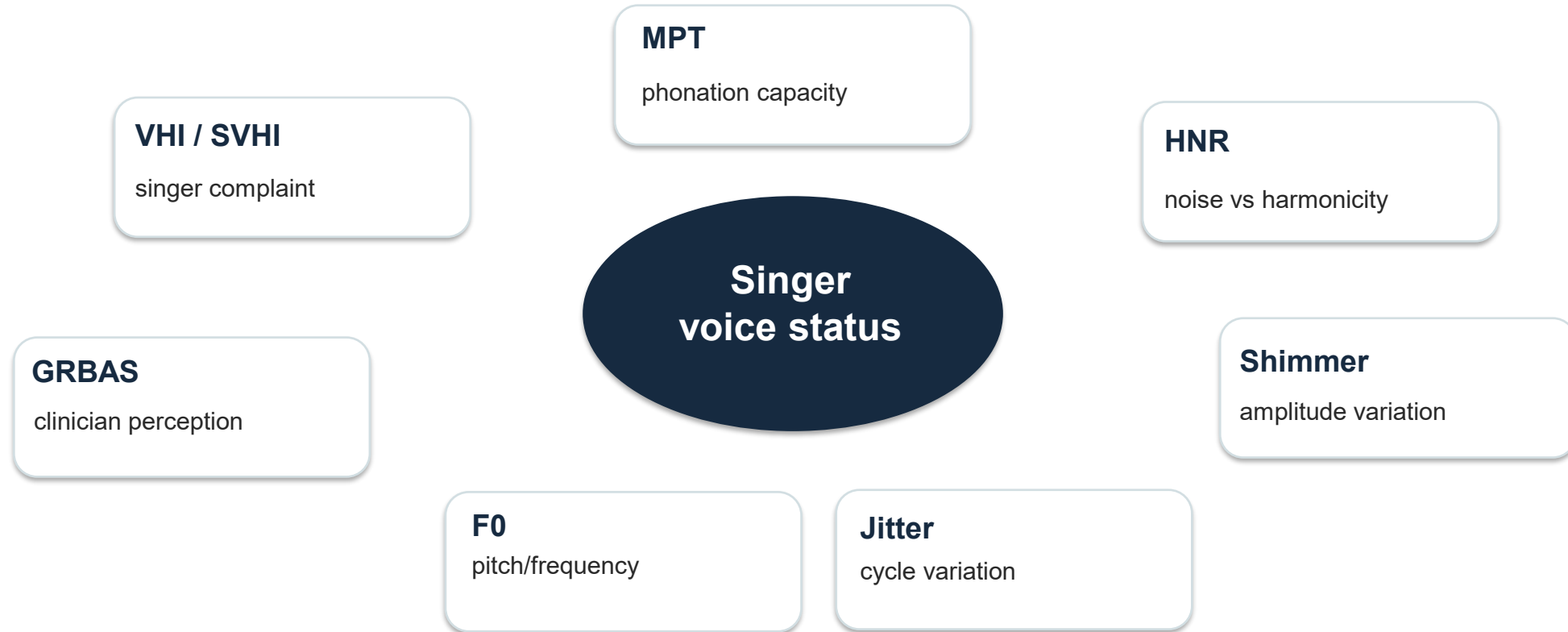
Singing teacher examination: when to refer

Aspect	Summary
Most often heard complaint	Vocal fatigue: tiredness after singing or a draining sensation
Most often seen objective findings	Wrong technique, intonation defect, or no audible finding by teacher
Possible contributing systems	Respiration, resonance, tissue condition, task demands, sensorimotor coordination
Common first treatment focus	Air support and vocal tract setting
Prognosis pathway	If only a local problem: bring back to work immediately. All other issues: send to laryngologist first. No popular singer with correct technique should have these issues.

Important distinction

Vocal fatigue is most often seen. The risk is equal across all popular vocal traditions. A route forward is routine measurement of voice-related biomarkers.

Voice-related biomarkers for popular singers



Deviations in F0, jitter, shimmer, and HNR give quantitative measures of vocal load and allow prognostic assessment of career interruption risk.

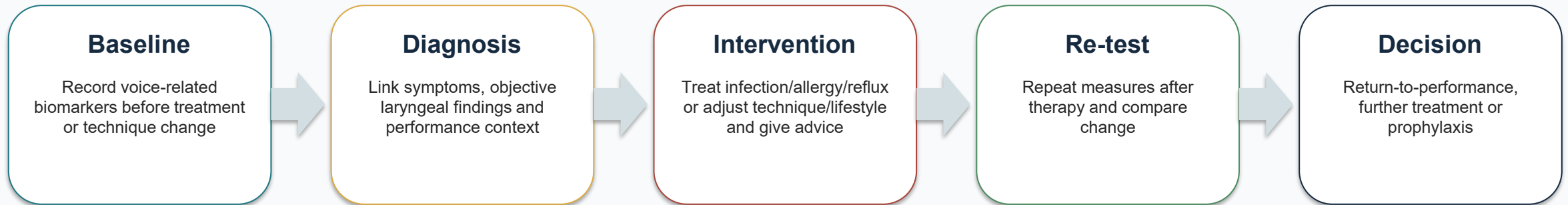
VHI/SVHI (Voice Handicap Index or Singers VHI) captures the singer's perspective;

GRBAS test assesses the clinician's perception of Roughness, Asthenia, and Strain.

MPT is Maximum Phonation Time.

Together, they support early detection, documentation of capability boundaries, and treatment decisions.

Measurement pathway: before and after therapy



Clinical value

Before/after assessment helps quantify improvement, document boundaries of capability and make singer-specific decisions about workload and technique.

Roles: clinicians, teachers, industry – AI and OCT

Actor	Responsibility
Medical doctor / laryngologist / phoniatician	Diagnose, quantify findings in pathology , manage treatment, advise on prognosis
Singing teacher	Identify technique issues, support healthy technique, refer when needed
Singer	Report symptoms, understand personal risk, adapt lifestyle and workload
Music industry	Provide suitable concert/studio demands and recognize genre-specific load
AI / foundation models	Future support for voice-related biomarker-based consensus and wider clinical use

Future direction

AI hybrid models or foundation models built on biomarker data could make clinical consensus accessible beyond the small group of specialist voice doctors — a significant step for a field where practical knowledge currently outpaces peer-reviewed evidence. Optical Coherence Tomography offers a further future tool for direct tissue assessment.

Integrating Voice-related Biomarker assessment into popular music research supports evidence-based vocal pedagogy, health monitoring, and medical and clinical decisions.

Key takeaway	Practical meaning
Popular singing is clinically diverse	Assessment should consider genre, technique, lifestyle and performance schedule
General and local disorders interact	Infection, allergy, reflux, trauma and other tissue related disorders must be interpreted in context
Biomarkers add objectivity	VHI/SVHI, GRBAS test, F0, jitter, shimmer, HNR and MPT help document change
Collaboration is essential	Clinicians, teachers, singers and industry share responsibility

Selected references: Keskinen & Juntunen 2024; Gill & Herbst 2016; Björkner 2008; Guzman et al. 2013/2019; Childs et al. 2023; Lechien & Briganti 2024; Bottalico & Hunter 2019; Siripurapu & Sataloff 2024; Brockmann-Bauser & Drinnan 2018; Cantor-Cutiva et al. 2023. Pedersen,Nashaat,Camesasca, Das and Hernández-Villoria 2026.

Thank you for listening!