SLPPC-T ASSESSMENT

This graphic is intended as a quick guide for a speech language pathology primary contact **(SLPPC-T)** Telehealth assessment of voice during the Covid-19 outbreak where there may be reduced access to routine ENT diagnostic laryngoscopy procedures and restrictions on face to face appointments.

1. Set up

Prepare for the session in advance.

Contact patient by phone in advance
- Check email & advise of microphone set-up,
- Check platform and connection,
- Skype, FaceTime, WhatsApp, Zoom, etc.
- Check primary spoken language.
- Identify communication barriers

Send pre-screening questionnaire via email in advance.

‡Email applicable self-report questionnaires in advance:
VHI-10 ☐ RSI ☐ SVHI-10 ☐ PVHI ☐
LHQ ☐ CSI ☐ LCQ ☐ EAT-10© ☐

Scan referral and medical records for key risk factors:
PMH: smoking, alcohol, endocrine / thyroid history, neurology, respiratory, gastro / reflux, ENT history - sinus, psych history, URTI, COPD, asthma, surgical history.
Medications: asthma, anti-reflux, relaxants, blood thinners.

2. Establish connection

Make video link with patient.

Check video & audio "Can you hear me?" "Can you see me?"

Check patient positioning: neck / shoulders / face visible.

Confirm patient's identity:
Name, DOB, Hosp ID number.

Check patient has privacy:
"Where are you right now?"

Note patients phone number in case connection is lost.

Seek permission to take audio recording of voice samples.

3. History

Adapt questions to the patients reported history in the prescreening questionnaire.

Demographic info
Age,
Gender identity.

Occupation / voice use history / occupational voice use

Current status:
COVID-19 : pos, neg, post-infectious.
Location: isolation / quarantine / working.

Explore most common symptoms (consider top 3):
Voice: hoarseness / roughness, frequent throat clearing, loss of vocal range, vocal fatigue / neck / throat discomfort with voicing (ask where), weak voice, breathy voice, voice projection.

Throat sensations: e.g. globus, tickle, pain / discomfort – at rest / with speaking (description of pain and location).

Dysphagia: fluids / solids, aspiration signs / chest inf, weight loss, obstruction.

Cough: chronic, dry / moist, chest / throat, bouts, spasms.

Onset: preceding illness (type) sudden, gradual, progressive, stable, improving, episodic, recurrent.

Date of onset: first symptoms (approx.)

Variability: day to day / across day / am Vs pm.

Aggravating / relieving factors or triggers: e.g. "What makes the symptoms worse?" "What makes it better?" "Worse with use?"
Contributory factors: Reflux, Stress, neck / shoulder tension.
History of previous symptoms

Medical Hx: Reflux, URTI, Neuro, Asthma, Allergy, Dyspnea, Sinus, Sleep Apnea, Intubation, Hearing loss, Psych history, Most recent GA, Endocrine / Thyroid, MSK, Injury, Falls history, Other.

Meds: Anti reflux, ACE inhibitors, Relaxants, Blood thinners, other.

Family med hx : Cancer, Neuro.

4. Examination

Assess physical, perceptual and functional symptoms as best you can.

Assessment tasks (take audio recording where able)

S:Z ratio, MPT x 3 (sustained ah), Count 1 – 10 (obs laryngeal movement) , Count 80 – 90, CAPE-V phrases, Rainbow passage, Vowel onset phrases, Pitch glide (Max Phonation range), Count 1 – 5 getting louder, Min & Max volume on /a/ for 3 secs, conversation.
Optional: SD Phrases, Sing' Happy Birthday', sing own song.

General Observations

Neck swelling / discomfort: consider clinician guided palpation as appropriate.
Can you feel any swelling?" "Where is the discomfort?"

Posture: upright / slouched.

Neck / Shoulder: tightness / tension / pain / jaw clenching.

Resp: tight, relaxed, breath holding, clavicular / thoracic.

Hearing: No aids / Aided (type).

Oro motor Ax: (patient leans into camera): Range / speed / tremor / tongue fasciculation.

Neurological: limb tremor, patient reported numbness or limb weakness.

Voice Evaluation

Perceptual: e.g. GRBAS: Grade, Rough, Breathy, Asthenia, Strain, (0 – 3) or CAPE-V (mild, moderate, severe) Pitch, Loudness, variability.

Aerodynamics: S/Z ratio, MPT.

Other features: Fry, Pitch Breaks, Phonation Breaks, Unstable pitch, Diplophonia, Falsetto, Aphonia, Tremor, Wet / Gurgly, Voice arrests.

Articulation: Dysarthria, Ataxia, Other observations.

Resonance: Normal, Hyper-nasal, Hypo-nasal, Cul-de-sac, Other.

Swallow evaluation (as needed)
- Use oro motor assessment to guide questions / examination.
- Timed water swallow test (TWST / WST).

Cough evaluation (as needed)
- Cough observation during assessment.
- Throat clear during assessment.
- Description / pattern of observed cough: dry / moist, bouts / spasms.
- Cough triggers observed, e.g. triggered by voicing tasks.

Trial of therapy: Release of constriction, RVT, SOVT, Twang, Other.
Response: Excellent, Good, Poor
Cough management strategies: forced swallow, reverse candle blow, nose breathing, pursed lip breathing, other.

5. Decision and action

Advise and arrange follow up / trial treatment strategies.

Liaise with ENT, taking in to account the current available pathways in your facility.

***Suspected functional neurological (psychogenic) voice disorder**

***Suspected muscle tension voice disorder**

***Suspected organic / neuro voice disorder (+/- secondary hyperfunction)**

Consider symptoms + signs from multidimensional assessments

No suspected laryngeal lesion / glottic insufficiency
- Provide vocal health and / or behavioural reflux Management advice,
- Provide trial of voice therapy via video link,
- Discuss with ENT as soon as able,
- Book routine stroboscopy with ENT when service available.

Suspected laryngeal lesion / glottic insufficiency / Neurology
- Discuss urgently with ENT,
- Consider priority laryngoscopy / stroboscopy,
- Provide vocal health and / behavioral reflux Mx advice,
- Consider trial of voice therapy via video link.

Consider need for onward referral or discussion with GP
- Chronic cough symptoms with no background respiratory work-up.
- Chronic gastro symptoms with no background gastroenterology work-up.
- Significant psychological background history and no current psychological referral.
- High risk dysphagia signs, consider referral for instrumental exam.
- Poorly managed chronic or acute URT conditions (allergy, asthma, sinus and reflux symptoms).

** caution advised in making a laryngeal diagnosis using this assessment approach. We advise the speech pathologist to maintain an open and honest dialogue with the patient and ENT, clearly document the altered pathway, and facilitate diagnostic laryngoscopy +/- stroboscopy for laryngeal diagnosis with ENT as soon as operationally available.*

No measurable improvement with 3 sessions of voice therapy → **Deterioration with monitoring or voice therapy** → **Any red flag symptoms** → **Seek immediate ENT advice**

Red flags

Malignancy:
Dyspnea
Odynophagia,
Hemoptysis,
Night sweats / fevers
Otalgia,
Unilateral lymph gland swelling,
Sig. weight loss (e.g. >10%)

Airway:
Stridor

Neurological
Breathiness
Tremor
Limb / oromotor weakness
Tongue fasciculations

±VHI-10 (voice Handicap Index- 10), RSI (Reflux Symptom Index), SVHI-10 (Singing Voice Handicap Index-10) PVHI (Paediatric Voice Handicap Index) LHQ (Newcastle Laryngeal Hypersensitivity Questionnaire) CSI (Cough Symptom Index) LCQ (Leicester Cough Questionnaire) Eat-10® (Eating Assessment Tool)

Developed by Payten CL, Novakovic D, Weir KA, Campbell MR, Madill CJ. January 2021
For enquiries please contact Christopher.payten@health.qld.gov.au