

MODIFIED MASAKO TASK

I. Description

The Modified Masako Task is an isometric exercise designed to facilitate both improved tongue base retraction and improved pharyngeal constriction for safe swallowing in patients with dysphagia. It may also contribute to improved hyolaryngeal excursion.

II. Purpose

- A. To increase the muscle strength, muscle endurance, and/or range of motion associated with tongue base retraction and/or pharyngeal constriction.
- B. To improve muscle strength, muscle endurance, and/or range of motion of the muscles of hyolaryngeal excursion.

III. Indications

The Modified Masako Task may be indicated for pharyngeal dysphagia therapy when decreased tongue base retraction, impaired pharyngeal constriction, and/or impaired hyolaryngeal excursion have been identified on the instrumental swallow assessment (Fiberoptic Endoscopic Evaluation of Swallow [FEES], Modified Barium Swallow [MBS]), Comprehensive Swallow Assessment (CSA), etc. If stimuable, a patient may occlude up to 3/3 of the intrapharyngeal airspace while performing Modified Masako Tasks.

IV. Contraindications

- A. Patients who have lesions of the tongue.
- B. Presence of lesions, masses, and/or significant discolorations involving the constrictors.
- C. Odynophagia (pain with swallowing).

V. Precautions

- A. Use caution with patients who have oral prosthetic devices or dentures and remove devices if indicated (e.g. loose fitting dentures should be removed for this exercise).
- B. Discontinue if patient appears to develop abnormal swallow pattern in response to this exercise (e.g. patient begins to exhibit gagging behavior in response to introduction of a bolus to the oral cavity).
- C. Discontinue if a patient with a severe cognitive communication impairment demonstrates an adverse psychological interpretation and/or reaction.
- D. Seizure precautions.

VI. Equipment

- A. Gloves
- B. 4 x 4 Gauze
- C. Bite block(s) if indicated
- D. Spray bottle of water (if unavailable, may use glass of water).
Spray bottle is for single patient use only to avoid cross contamination.

VII. Procedure

- A. Explain procedure and purpose to the patient.
- B. Ensure patient privacy.
- C. Set up appropriate equipment.
- D. Instruct patient to protrude his/her tongue.
- E. The clinician will hold the patient's tongue with gauze.
- F. While the clinician is manually holding the patient's tongue with a 4 X 4 gauze pad, have the patient close his/her lips around his/her tongue and then instruct patient to attempt to swallow. The clinician may need to cue the patient several times before the patient will be able to initiate a complete swallow. However, if the patient is only able to perform approximations of a swallow in which the clinician feels the tongue retracting even though a complete swallow is not achieved, then the clinician will continue to encourage the patient to perform the task as this type of approximation may also have a therapeutic benefit. These approximations may eventually culminate into complete

swallows with persistence. A significant amount of cueing is required on the part of the clinician until the patient successfully attains the concept.

- G. Hold onto the tongue with gauze throughout each swallow to ensure active resistance.
- H. The goal is to perform 60 to 70 repetitions per set within 5 to 10 minutes. Initially, many patients will be unable to meet this goal. In these cases, it is recommended to baseline the number of repetitions a given patient can initially perform and divide by 70 to derive the baseline percentage.
- I. Have patient open his/her mouth between swallows so that the clinician may spray water mist into the oral cavity between each complete swallow to provide lubrication. Some patients may find that he/she can perform two or three complete swallows under these isometric conditions before requiring oropharyngeal lubrication. If a spray bottle with an atomizer is unavailable, then consider small sips of water from a cup or spoon. Consider patient safety levels and coinciding respiratory conditions.
- J. Select treatment intensity and modify the number of repetitions per set, time compression (time allocated to perform a set of repetitions), and number of sets per session as clinically tolerated.
- K. Monitor patient for signs symptoms of discomfort and/or distress.
- L. Provide brief rest breaks as needed.
- M. Dispose of all materials in accordance with facility guidelines.

Note: As an option, a given patient could also be instructed to protrude tongue, hold between his/her teeth, and then swallow versus hold his/her own tongue with the gauze. However, it is felt the clinician can provide better coaching and feedback when he/she is holding the patient's tongue for these swallow exercises.