

TMJ Exercises Analysis - Interactive Guide Structure

Source Information

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Medical Background

Condition: Temporomandibular Joint (TMJ) dysfunction

Location: Jaw joint located just in front of the ear

Cause: Inflammation caused by misalignment of muscles inserting into the joint

Symptoms:

- Ear pain
- Referred pain to the side of the head
- Face pain
- Jaw pain

Exercise Program Overview

- **Frequency:** 6 times per day
- **Duration:** At least 3 weeks
- **Time per session:** 1 minute to complete all exercises
- **Purpose:** Realign the muscles in the TMJ region
- **Important note:** Takes several weeks to realign - don't give up

Complete Exercise List with Detailed Instructions

Exercise 1: Tongue-to-Roof Breathing

Name: Deep Breathing with Tongue Position

Description: Hold tongue to roof of mouth with proper positioning while performing deep breathing

Instructions:

1. Place tongue tip just behind the teeth
2. Hold tongue firmly against the roof of the mouth
3. Take six deep breaths while maintaining tongue position

Timing:

- Repetitions: 6 deep breaths
- Hold duration: Throughout each breath cycle
- Rest: Natural breathing rhythm between breaths

Exercise 2: Tongue-Stabilized Jaw Opening

Name: Wide Mouth Opening with Tongue Support

Description: Open mouth widely while maintaining tongue position to prevent jaw clicking

Instructions:

1. Hold tongue to the roof of your mouth
2. Open mouth widely
3. Ensure jaw does not click during movement
4. Close mouth slowly

Timing:

- Repetitions: 6 times
- Movement: Slow and controlled
- Rest: Brief pause between repetitions

Safety Note: Jaw should not click - this indicates proper alignment

Exercise 3: Bilateral Jaw Pressure Control

Name: Finger-Guided Jaw Alignment

Description: Use finger pressure on both sides to guide proper jaw alignment during opening

Instructions:

1. Place one finger on each side of jaw
2. Apply equal pressure to both sides
3. Open jaw very slowly while maintaining pressure
4. Do not allow jaw to click
5. If jaw clicks, release and restart more slowly
6. Close jaw with continued pressure guidance

Timing:

- Repetitions: 6 times
- Movement: Very slow and controlled
- Hold: Maintain pressure throughout movement

Safety Note: Equal pressure ensures correct alignment; clicking indicates need to slow down

Exercise 4: Chin Resistance Exercise

Name: Fist-Resistance Jaw Opening

Description: Create resistance with fist under chin while opening jaw

Instructions:

1. Make a fist
2. Place fist directly under chin
3. Balance the weight of fist against chin
4. Gently try to open jaw against resistance
5. Avoid allowing jaw to click
6. Hold position
7. Release and return to starting position

Timing:

- Hold duration: 6 seconds
- Repetitions: 6 times
- Rest: Brief pause between repetitions

Safety Note: Try not to allow jaw to click during exercise

Exercise 5: Lateral Jaw Resistance (Left and Right)

Name: Side Jaw Pressure Exercise

Description: Apply steady pressure to side of jaw below the hinge

Instructions:

1. Press fist against left side of jaw below the hinge
2. Maintain steady, consistent pressure
3. Hold position
4. Release
5. Repeat on opposite (right) side of jaw

Timing:

- Hold duration: 6 seconds per side
- Repetitions: 6 times per side
- Rest: Brief pause between repetitions and sides

Sequence: Complete all repetitions on left side, then switch to right side

Exercise 6: Double Chin Neck Stretch

Name: Chin Retraction Exercise

Description: Create double chin position to stretch neck muscles

Instructions:

1. Place one finger on chin
2. Move chin backward as if making a double chin
3. Feel tightness at the back of neck (this is normal and desired)
4. Hold position
5. Release and return to neutral position

Timing:

- Hold duration: 6 seconds
- Repetitions: 6 times
- Rest: Brief pause between repetitions

Expected sensation: Tightness at back of neck indicates proper execution

Exercise Sequence and Flow

1. **Preparation:** Tongue-to-Roof Breathing (Exercise 1)
2. **Mobility:** Tongue-Stabilized Jaw Opening (Exercise 2)
3. **Alignment:** Bilateral Jaw Pressure Control (Exercise 3)
4. **Strengthening:** Chin Resistance Exercise (Exercise 4)
5. **Lateral Strengthening:** Side Jaw Pressure - Left then Right (Exercise 5)
6. **Neck Integration:** Double Chin Neck Stretch (Exercise 6)

Safety Notes and Precautions

1. **No Clicking:** Jaw should not click during any exercise - this indicates misalignment
2. **Slow Movement:** All movements should be slow and controlled
3. **Equal Pressure:** When using bilateral pressure, ensure equal force on both sides
4. **Consistency:** Must be performed 6 times daily for at least 3 weeks
5. **Patience:** Takes several weeks to realign muscles - don't give up
6. **Professional Guidance:** Exercises prescribed by medical professional

Technical Specifications for Interactive Guide

Audio Cue Requirements

- **Exercise Introduction:** Name and brief description
- **Instruction Guidance:** Step-by-step verbal instructions
- **Timing Cues:** Count-down for hold periods (6 seconds)
- **Repetition Counting:** "1 of 6", "2 of 6", etc.
- **Transition Cues:** Moving between exercises
- **Safety Reminders:** "Ensure no clicking", "Apply equal pressure"
- **Encouragement:** Motivational messages about consistency

Visual Requirements

- **Anatomical Reference:** TMJ location diagram
- **Hand Positioning:** Clear illustrations for finger/fist placement
- **Jaw Movement:** Animation showing proper opening/closing
- **Tongue Position:** Diagram showing tongue-to-roof placement
- **Progress Tracking:** Visual indicators for repetitions and sets
- **Timer Display:** Visual countdown for hold periods

Device Compatibility Features

- **iPhone:** Touch-friendly interface, portrait orientation optimization
- **iPad:** Larger display for better visual guidance, landscape support
- **Mac:** Keyboard shortcuts, larger screen real estate utilization
- **Cross-platform:** Consistent experience across all devices

Interactive Elements

- **Start/Pause/Reset:** Exercise session controls
- **Exercise Selection:** Jump to specific exercises
- **Progress Tracking:** Daily completion tracking
- **Reminder System:** 6x daily notification scheduling
- **Settings:** Audio volume, speech rate, reminder timing customization

Images and Visual Content Notes

Current Status: No images or photos were included in the source PDF

Recommendation: Create custom illustrations showing:

- Proper finger placement for each exercise
- Jaw positioning and movement directions
- Tongue placement against roof of mouth
- Facial anatomy highlighting TMJ location
- Hand/fist positioning for resistance exercises

This structured analysis provides all necessary information to create a comprehensive interactive TMJ exercise guide with audio cues, visual instructions, and proper timing for all target devices.