“TalkTools Oral Placement Therapy for Feeding and Speech”

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Presentation Outline

• Background
• TalkTools v. Oral Motor Therapy
• TalkTools' place in the SLT world
  • Application of TalkTools
    • Underlying Principles
• TalkTools OPT – How does it work?
  • Evidence based practice
    • The future
Background

• Sara Rosenfeld-Johnson – SLP in America
  • Started working in this field in 1973
  • Sara developed her own techniques in conjunction with OTs and Physios.

• Used for both feeding and speech – difficult to separate these two.

• The TalkTools approach is only a small part of any comprehensive programme for speech and/or feeding.
Oral Placement Therapy

Oral Motor Therapy is an umbrella term that covers many different approaches. Talktools Oral Placement Therapy is one specific type of Oral Motor Therapy.
TalkTools' place in the SLT World

• TalkTools OPT is another tool in the SLT repertoire and is not meant to replace other therapy approaches.

• It is not designed to be used alone and is often used to work on underlying motor and sensory difficulties before other speech or feeding approaches are introduced.
Application of TalkTools OPT

- Appropriate for anyone displaying reduced mobility, agility, precision and endurance of the oral structures and musculature that adversely affects feeding and/or speech.
  - Downs Syndrome
  - Autistic Spectrum Disorders
  - Cerebral Palsy
  - Head injury / stroke
  - Dyspraxia / Dysarthria.
Application of TalkTools OPT

For people who cannot imitate targeted movements using auditory and visual stimuli
“Look, listen and do what I do”

For people who cannot follow specific instructions to produce targeted movements
“Put your lips together”

For people who need a more tactile approach
Underlying Principles of TalkTools OPT.

• Three main concepts affecting movements of the jaw, lips and tongue are considered in TalkTools activities:
  • Dissociation
  • Grading
  • Fixing

• These concepts underlie the oral movements necessary for feeding and speech.
Dissociation

The separation of movement, based on adequate strength and stability in two or more muscle groups.
Grading

The controlled segmentation of movement based upon dissociation, strength and stability within the targeted muscle group.
Fixing

An abnormal movement pattern which occurs secondary to reduced stability and is used to compensate for the lack of grading within a muscle group.
Underlying Principles of TalkTools OPT.

- TalkTools OPT takes a bottom up approach.
  - Tongue
  - Lips
  - Jaw
Underlying Principles of TalkTools OPT.

- Word level skills
- Single Sounds
- Oral motor skills
Underlying Principals of TalkTools OPT

- Bottom up approach, works on foundations for feeding and speech
- Oral placements – training and practice
- Motor planning - training and practice
- Sensory awareness and feedback
- Whole body approach
- Tactile, visual and auditory feedback
TalkTools OPT – How does it work?

• Assessment by a TalkTools trained therapist to look at placement, motor and sensory difficulties.

• Hierarchy of activities that can be used by parents and carers to target placement, motor and sensory difficulties.

• Continuing programme lead by a TalkTools trained therapist.

• Programmes are based on clear and functional outcomes with measurable criteria for success.
TalkTools OPT – How does it work?

• Bubble hierarchy

• Step 1 – Pop the bubble on lips

Goals – Develop awareness of sensation on lips as a prerequisite for lip closure for feeding, saliva control and speech.

- Achieve lip closure from an open mouth posture
- Build understanding of cause and effect

Criteria for success – client can pop the bubble using lip rounding and protrusion 10x
TalkTools OPT – How does it work?

• Step 2 – Breath or blow on the bubble

Goals – Associate abdominal exhalation with movement of bubble.

- Develop controlled airflow for phoneme production
- Develop jaw–lip dissociation

Criteria for success – Client can complete exercise 10x without a break
TalkTools OPT – How does it work?

• Step 3 – Blow the bubble off the wand

Goals

- Improve controlled airflow volume

  - Work on jaw – lip dissociation
  - Develop strength and stability in orbicularis-oris muscles for lip rounding

Criteria for success – Client can repeat exercise 10x successfully without a break
TalkTools OPT – How does it work?

- Step 4 – Blow a bubble through the wand

Goals – Improve controlled, elongated airflow
  - Work on jaw – lip dissociation
  - Improve lip rounding skills

Criteria for success – client can blow bubbles 10x in this position without support, without a break
TalkTools OPT – How does it work?

- Step 5 – Blow bubbles for increasing distances

Goals – Improved controlled, elongated airflow
  - Develop jaw stability
  - Achieve jaw – lip dissociation
  - Develop lip rounding / protrusion skills
  - Develop tongue retraction skills
  - Develop jaw – lip – tongue dissociation skills

Each step can be further task analysed into smaller steps if needed.
### Example – Sensory Motor Programme for Feeding and Speech

<table>
<thead>
<tr>
<th>Massage</th>
<th>Suggestions:</th>
<th>Use firm long strokes.</th>
<th>Increase sensory awareness and organisation</th>
<th>Encourage midline orientation</th>
<th>Facilitate increased cheek and upper lip mobility.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensory Beanbags</td>
<td>Bare hands</td>
<td>1. From the TMJ (in front of ears) to the corners of G’s lips.</td>
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<tr>
<td>Lotion</td>
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<td>2. Alongside the nostrils to the outer corners of the lips.</td>
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<tr>
<td>Face flannel</td>
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<td>3. Under the nostrils to the upper lip.</td>
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<tr>
<td>Vibration</td>
<td></td>
<td>Do each set 5 times</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Tap and Tone</th>
<th>Fingers or other suitable item</th>
<th>Use firm rhythmic tapping to the beat of a favourite tune or finger play activity.</th>
<th>Provide sensory input.</th>
<th>Tone the muscles of the cheeks and lips. You can also use these firm tapping movements when wiping G's face.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaw routine</td>
<td>Description</td>
<td>Physio ball</td>
<td>Instructions</td>
<td>Facilitate graded jaw movement.</td>
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<tr>
<td>1. Jaw rock</td>
<td>Sit on the ball with G on your lap. Bounce gently to create a rhythmic up and down movement. Provide lip/jaw support and map the rhythmic movements onto G’s jaw so that his jaw is moving up and down. Try to achieve 10 repetitions.</td>
<td>Physio ball</td>
<td>Facilitate graded jaw movement.</td>
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<tr>
<td>2. Bilateral chewy tubes</td>
<td>Two red chewy tubes Put the two chewy tubes in G's mouth, one on each side, on his first molars. The tubes should stick out sideways from his mouth. Instruct G to do 5 slow bites using a regular rhythm. Jaw support may be needed.</td>
<td>Two red chewy tubes</td>
<td>Increase jaw strength. Increase jaw symmetry. Increase tongue retraction. Increase graded movement.</td>
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<tr>
<td>3. Stuffed chewy tube</td>
<td>Red chewy tube Chip sticks or puree Stuff a red chewy tube with a chip stick or some puree. Present the tube on one side of G's mouth as for previous exercise. Provide jaw support as needed. Instruct G to do 3 chews. Swap to the other side and repeat.</td>
<td>Red chewy tube Chip sticks or puree</td>
<td>Increase lateral chew.</td>
<td></td>
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<tr>
<td>Lip routine</td>
<td>Z vibe with yellow head. Iced trimmed toothette. Vibrating toothbrush with small head.</td>
<td>Place the Z vibe yellow head under G's top lip and roll from the outside corner to the middle. Stop. Repeat on the other side. Do this 5 times.</td>
<td>Increase sensory awareness. Increase upper lip mobility.</td>
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<tr>
<td>Lip routine 1. Upper lip stretch</td>
<td>Z vibe with yellow head. Iced trimmed toothette. Vibrating toothbrush with small head.</td>
<td>Place the Z vibe yellow head under G's top lip and roll from the outside corner to the middle. Stop. Repeat on the other side. Do this 5 times.</td>
<td>Increase sensory awareness. Increase upper lip mobility.</td>
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<tr>
<td>Lip routine 2. Micky mouse /m/</td>
<td>Z vibe and mouse head</td>
<td>Present Micky's ear between G's lips and model a /m/ sound. Encourage G to copy you and close his lips on Micky's ear. Repeat 6 times</td>
<td>Provide sensory input Increase lip closure.</td>
<td></td>
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<tr>
<td>Lip routine 3. Cheek toning / lip rounding</td>
<td>Z vibe with green cylinder shaped head</td>
<td>Present the rounded z vibe head between G's lips. Provide jaw / lip support as needed to facilitate lip rounding. Model a /w/ sound and encourage G to copy. Repeat 10 times.</td>
<td>Provide sensory input Facilitate increase tone in cheeks. Encourage lip rounding.</td>
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<tr>
<td>Tongue routine 1. Lateral tongue to tongue tip</td>
<td>Bite block #6 Z vibe with small green square head</td>
<td>Use the bite block to stabilize G's jaw by asking him to bite on it. Stroke along the side if G's tongue from front to back using the Z vibe. As you approach the front, press sideways to encourage the tongue tip to point and move across the midline. Do this 5 times. Repeat on the other side.</td>
<td>Provide sensory input. Facilitate tongue elongation Facilitate tongue tip formation Facilitate tongue lateralization.</td>
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<tr>
<td>Tongue routine 2. Chewing (pre feeding chewing hierarchy level 2)</td>
<td>Z vibe with small green square head</td>
<td>Place z vibe on G's outermost front tooth (lateral incisor) and encourage G to bite. Move back to his canine tooth, then to his first molar. Do this pattern 5 times and then repeat on the other side.</td>
<td>Provide sensory input. Facilitate tongue tip pointing. Facilitate graded tongue retraction. Facilitate lateral chew</td>
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<tr>
<td>Tongue routine 3. Syringe feeding</td>
<td>Small syringe (no needle!) Favourite puree</td>
<td>Squeeze 1-2ml of a favourite puree into the cheek cavity. This should be between the cheek and the gum at about the level of the first molar. Provide jaw / lower lip support. Repeat 4 times on each side.</td>
<td>Increase tongue lateralization Increase tongue retraction.</td>
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<tr>
<td>Feeding routine</td>
<td>Honey bear</td>
<td>Feeding routine</td>
<td>Chewing hierarchy level 1.</td>
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<tr>
<td>1. Honey bear</td>
<td>Honey bear with favourite juice or water</td>
<td>Present honey bear tube in the corner of G's lips and squeeze a small amount of liquid into his mouth. When G closes his lips. Move the tube to the midline and squeeze again. Repeat alternating starting side. Repeat 5 times on each side.</td>
<td>Increase lip rounding Facilitate suck</td>
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</tr>
<tr>
<td>2. Chewing hierarchy level 1.</td>
<td>Straws with frozen puree in them, or chip stick, or choc finger, or similar.</td>
<td>Place chew food on first molar. Keep hold of the other end. Instruct G to &quot;chew, chew, chew, chew&quot; and facilitate a rhythmical chew to support G to chew the food. Provide jaw support if needed. Repeat several times on each side if G will tolerate.</td>
<td>Facilitate lateral chew Facilitate jaw grading Facilitate tongue retraction. Develop motor plan for chewing.</td>
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Evidence Based Practice

- Currently there is limited formal research into TalkTools – to prove or disprove efficacy.
- Some articles discrediting Oral Motor techniques in general – often down to personal opinion.
- Many therapists, worldwide, using TalkTools at clinical level with great success.
Evidence Based Practice

• Clinical experience is the foundation of our profession
• Much of what we do on a day to day basis in therapy is unproven.
• We are paid to figure out what will work for a particular client, not replicate research projects.
• Very few clients present as “Text book” so we should be able to think outside the “text book”
Evidence Based Practice

Clients and Family

Research

Clinical Experience
Clinical Experience

• 3 year old girl - severe dribbling - otherwise was developmentally normal.
• Clothing always wet, surgeon considering op.
• Mum worked through a TalkTools programme under guidance of TalkTools trained SLT.
• Now has no dribbling – less than 1 year later.
• Increased sensation on her chin - 'I can feel the tickling on my chin now mummy.”
• Jaw is in a different position to before, much higher.
Clinical Experience - Heathar

• Young adult with ASD - “Severely dyspraxic”

• **Achievements:**

  • Can now isolate nasal / oral airstream. Achieved using horns, bubbles and traditional approaches

  • Can maintain higher jaw position to support lip closure and rounding. Achieved using jaw grading bite blocks
Clinical Experience - Heathar

• Can achieve adequate oral air stream and lip rounding.
  Achieved using horns, bubbles and straws

• Can round lips to create effective lip seal for straw use.
  Achieved using horns, bubbles and straws

• General improvement in oral awareness, jaw strength and stability
Clinical Experience - Heathar

- Transition to speech sounds
- Improved oral awareness, breath control, jaw control and lip closure has allowed introduction of “apraxia shapes”
- Using visual, tactile and auditory cueing to work on bilabials.
- Can now produce /p/ + /b/. Working on /m/.
- Can produce a loud voiced “uh” which is used functionally in 'puh' to call for attention from another room.
Clinical Experience - Heathar
Evidence Based Practice

• Refer to research reports describing the benefits of a particular treatment...

"Is this treatment beneficial?"

• Select treatments based on theoretical soundness...

“Should this treatment be beneficial?”
Non functional movements?

• Criticisms based on the use of non functional movements in exercises to work on feeding and speech

• Only functional movements for feeding and speech are used as part of TalkTools OPT Programmes.

• Many of the exercises used in TalkTools OPT use pre speech and feeding movements.
Developmental Norms?

• TalkTools Therapy incorporates concepts of normal age appropriate motor development to determine appropriate therapy for each child. For example:
  • Jaw control is achieved before lip control
  • Tongue flexion / extension is achieved before lateral tongue movements
Working in isolation?

- A common misconception is that TalkTools is used in isolation.
- TalkTools therapy was developed to be used in conjunction with other speech and feeding interventions.
- Works on foundation skills necessary to achieve feeding and oral skills, and then be transitioned in to function for feeding and speech.
Evidence Based Practice

• TalkTools Oral Placement Therapy is being used worldwide.

• There is a huge amount of single client clinical evidence and experience that shows it is successful when used correctly.

• Most SLT's who attend a TalkTools course find that TalkTools presents a common sense approach to analysing a therapeutic challenge and addressing it practically.
The Future...

• Research is underway.
• An increasing collection of clinical evidence is being compiled.
• More therapists are learning about the TalkTools Oral Placement Therapy, so they can make an accurate and informed decision for themselves.
• www.talktools.net
• UK equipment supply www.eg-training.co.uk
TalkTools Courses

• Level 1: A Three Part Treatment Plan for Oral-Motor Therapy”

• Level 2: Oral – Motor Therapy: Assessment and Programme Plan development”

• Feeding Therapy: A Sensory Motor Approach

• Childhood Apraxia of Speech: The Oral Motor Component

• Currently in development – TalkTools and Autism: A specific approach
TalkTools U.K Conference

Saturday 4\textsuperscript{th} June 2011
Swindon
£65 per person
www.eg-training.co.uk

• A great place to start or to update!
References


