The Role of the SLP in Treating those with Brain Injuries: Considerations for Mental Health Professionals

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Talk Outline

- Goals of Talk
- Brain Injury Facts
- Multidisciplinary Approach
- SLPs scope of practice
- Case studies
- When to refer
Goals

For you:
- ID 3 SLP tx areas with BI
- Describe at least 4 scenarios for which collaboration between the SLP and mental health professional is warranted
- ID when SLP referral is needed

For me:
- Meet mental health professionals to whom I can refer my patients
Brain Injury Facts

- Acquired after birth:
  - Traumatic Brain Injury
  - CVA
  - Dementia
  - Chronic Traumatic Encephalopathy
  - Concussion
  - Post-Concussive Syndrome, and Migraine

- Over 2.8 million sustain one yearly
- Over 9 million currently live with a lifelong disability from it

(Faul et al 2010; Roger et al, 2010)
Multidisciplinary Approach

DIRECT

INDIRECT
Why Is Approach Important?

- You likely have treated someone with a brain injury:
  - TBI & Mental Health d/o (40%; Koponen et al. 2011)
  - Stroke & Mental Health d/o (33%; Katon et al, 2012)
  - TBI & PTSD (18%; Rand, 2008)
  - Dementia & Depression (up to 60%; Muliyala & Mathew Varghese, 2010)

- Better overall treatment outcomes
  (Goranson et al. 2003, Schierhout & Roberts 2003, Cifu et al. 2003)
Speech-Language Pathology & Brain Injury

1. Speech/Voice
2. Swallowing
3. Language
4. Cognition

“Sally sells sea shells by the seashore”
Speech/Voice

- Oral motor anatomy (strength, ROM of articulators)
- Oral motor function (SMRs & AMRs; intelligibility)
- Vocal quality (hoarse, harsh, breathy, nasal, loudness)
Swallowing

- ID least restrictive consistency in order to maintain adequate nutrition and hydration

- Oral Preparatory Stage
- Oral Stage
- Pharyngeal Stage
- Esophageal Stage
Language

- Auditory Comprehension
- Reading Comprehension
- Verbal Expression
- Written Expression
- Pragmatic skills

“All seems Greek to me...”
Cognition

- Attention
- Executive Function
- Insight
- Judgment
- Orientation
- Organization
- Problem Solving
- Reasoning
- Recall
- Visuospatial skills
Case Studies

Age, Medical Diagnosis

Concomitant Mental Health Issues; Direct/Indirect Approach

Speech Diagnosis

Speech Treatment
Jack

- 17 year old, dx encephalitis

- PTSD (witnessed his friend being murdered); Direct

- Severe cognitive communication deficits nonverbal (selective mutism/dysarthric), decreased insight/safety awareness, orientation, memory

- Co-tx with Neuropsychologist, writing and saying name, singing, counting, safety, orientation
Betty

- 71 year old s/p left-sided TIA
- Anxiety, compulsive hoarding; Indirect
- Mild aphasia
decreased word finding, reading comp, written expression
- Language drills (synonyms, antonyms, analogies, category naming), compensatory strategy training [language (word wheel, alphabet), read (follow, imagery, reread) write (completeness, sequencing)]
Tim

- 73 year old with dx dementia with negative medical findings (MRI/blood work)

- Depression; Indirect

- Mod-sev cognitive communication deficits decreased attention, verbal/prospective memory, word finding, math calculations

- Compensatory strategy training (planner, picture dictionary to recall names/words, excel for math), family education/training
Lou

- 69 year old s/p R-sided CVA
- Depression, Anxiety, Addiction; Direct
- Mild-mod cognitive communication deficit decreased pragmatics, executive function, verbal/ prospective memory, attention
- Topic initiation/maintenance/loudness (NISOTNINY), family education/training, compensatory strategy training (planner, cell phone alarm)
Stacy

- 29 year old s/p MVA with TBI & multiple skull/facial fractures
- Anxiety, Depression; Indirect

- Mild cognitive communication deficits
depleted attention, processing speed, memory, abstract reasoning, verbal fluency, word finding, oral motor (aspiration risk)

- Timed verbal/visual attention tasks, short term memory drills, reading comp, idioms/proverbs, naming, oral motor, family education/training, compensatory strategy training
Nancy

- 69 year old dx mild dementia, hx R-sided CVA, hx concussion

- Anxiety, Depression (added Prestiq); Indirect

- Mild cognitive communication deficit
decreased visual/spatial memory, attention, word finding, reading comprehension

- Compensatory strategy training (journal, driving, seat belt, parking, names, cooking), language drills, reading comp drills
## Adult Communication Abilities

- **Attention**
  - Digit Span = 7
  - 30-minute conversation

- **Recall**
  - Recall 3 items after 5 mins

- **Verbal Fluency**
  - >12 items in category in 1 minute

- **Auditory Comprehension**
  - 3 step mod’ly complex commands

- **Reading Comprehension**
  - > 80% recall of magazine article

- **Written Expression**
  - bio info, complete paragraph, card

- **Swallowing**
  - Cracker, regular liquids by straw
Refer for Language Therapy if:

- Word finding trouble
- Trouble following conversation/directions
- Reading or writing difficulties
- Socially inappropriate
- Cannot state and/or write biographical info
Refer for Cog-Ling Therapy if:

- Forgets appointments/your name
- Repeats a lot
- Poor insight into deficits
- Not oriented
- Safety risk due to poor judgment
- Cannot sequence ideas or activities
- Concrete thinker only
- Trouble managing daily calculations
Refer for Speech/Voice Therapy if:

- Hard to understand
- Facial muscles have weakened
- Vocal quality is noticeable
Refer for Swallowing Therapy if:

- Significant weight loss (5%)
- Cough/throat clear when eating
- Food gets stuck when eating
- Frequent URIs
- Avoid foods once eaten
THANK YOU!

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