The Role of a Multi-disciplinary Team Clinic

Marion Downs Hearing Center
at the
University of Colorado Hospital
Aurora, CO

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COlorado Multi-disciplinary Program for Assessment Strategies and Support

“Helping Those with Hearing Loss Navigate the Way to Better Communication”
Team Members...

- Audiologists
- Speech Language Pathologist / AV Therapist
- Parent Advocates
- Adult Mentor / Role Model
- Developmental Pediatrician / Geneticist
- Genetics Counselor
- Neurotologist
- Child Psychologist
Team Members Continued...

- Pediatric Nurse Practitioner / Child Development Specialist
- Case Manager (4th year AuD externs)
- Program Support Assistant
- Social Worker – future addition
- Occupational Therapist – future addition
The Clinic Day

- Specially designed schedule to address the family & child’s needs
  - Full day of appointments/evaluations
  - Parents encouraged to bring snacks, toys, etc.
  - Lunch break for family / Provider team meeting
  - Each provider compiles list of recommendations
  - Family leaves with list of recommendations
  - Formal team report to follow by mail
When to refer?

- Children newly identified with hearing loss
- Any type and degree of hearing loss
- Concern about progress
- Delayed speech and language development
- Questions regarding appropriate technology and intervention
- Cochlear implant consultations
- Interest in genetic counseling/testing
- Questions regarding school placement/services
- Children/families from outside clinics looking for 2nd opinions or more information
What are parents looking for?

- Answers!
  - Pieces to the puzzle
- Support
- Understanding
- Confirmation
- Information /Advice / Guidance
- Next steps
- Referrals to other providers
- Educational support
Benefits of Parent Advocates & Adult Mentors

- Families can feel alone and scared about what the diagnoses could mean...
  - Hearing loss, syndrome, autism, developmental delays, sensory integration, etc.
- Moral support / Listening / Empathy
- Sharing their own personal stories
- Connecting families with community events
  - Hands & Voices
- Meeting other families in similar situations
  - Guide by Your Side – Hands & Voices
Benefits of Case Managers

- Compile history prior to clinic day to share with team
- Shadow family throughout day
- Provide list of findings/suggestions
  - Second set of ears for the family
  - Taking notes for family throughout the day
- Articulate family concerns/questions perhaps not addressed during team meeting
- Type formal reports to be sent to family and other providers
Benefits of a Team Approach

- Team collaboration
  - 15 heads are better than one!
- Provide diagnoses and treatment plans
- Referrals to other professionals
- Help family get informed and connected
- Complete all evaluations/consultation in one to two days
Feedback from Families...

- “Great experience overall. We learned a lot of things.”
- “Long day but worth it. Very helpful and informative.”
- “What a great team of people who care!”
- “Having someone take us from one appointment to the next was helpful.”
- “We’re not crazy! Our concerns were confirmed and validated.”
- “A lot of information to process”
- “A good place to start, now the work begins.”
Cases...
Case #1

3 year old male

History:

- ANSD bilaterally; Presented as profound loss consistently
- Right CI - 20 months of age
- Objective measures absent (no NRT or eSRT responses)
- Good responses with CI initially; Normal P1 response
- Very limited progress in language/communication (spoken or sign)
- Difficulties mapping/testing using VRA or play
- Sensory integration concerns
- Absent P1 response later on; No interest in listening; Low communicative intent
Case #1 continued...

Questions/Concerns

- Good/bad hearing days with CI?
- Child loves to wear CI but no progress in auditory skill development
- Parents interested in 2\textsuperscript{nd} CI (left ear)
- Autism spectrum disorder?
- P1 – now absent
- Parents wanted 2\textsuperscript{nd} CI
Case #1 continued...

**Results / Recommendations:**

- New HA trial with non-implant ear
  - 3-6 months
- Repeat P1 testing
- Continue weekly speech, language, listening therapy
- Continue OT services
- Consider 2\textsuperscript{nd} CI in 3-6 months
- 2\textsuperscript{nd} CI completed at 39 months of age
  - Improved results; interest in listening; communicative intent
Case #2

- 30 month old male

**History:**

- ANSD; hyperbilirubinemia; multiple blood transfusions
- Maternal alcohol abuse during pregnancy
- Child in custody of aunt/uncle
- Binaural HAs, consistently hears better with HAs; Excellent VRISD scores
- Very slow progress in speech/language development
- Using some sign language (limited)
Case #2 continued...

- **Questions / Concerns:**
  - Sensory integration issues
  - Hyperactivity
  - Preschool issues due to behavior
  - Feeding concerns; Slow growth; Small size for age
  - Dysmorphic features
  - Fetal alcohol syndrome?
  - Fragile X syndrome?
Case #2 continued...

**Results / Recommendations**

- Confirmation of Fetal Alcohol Syndrome
- Genetic testing for Fragile X syndrome - negative
- Special pre-school placement
- OT services regarding sensory issues
- Continue HA use during all waking hours
- Additional speech/language therapy
Case #3

- **Age:** 17 month old male
- **History:**
  - 2nd opinion
  - Child diagnosed with ANSD in at least one ear
    - Behaviorally: right ear mild to moderate, left ear profound
  - Strabismus; nystagmus
  - Delayed global development
    - Not walking, unsteadiness
  - Normal pregnancy/delivery
    - Parents concerned re: meconium aspiration
Case #3 continued...

Questions / Concerns

- Balance function?
- Vision?
- Auditory discrimination?
- Neurological component?
- Parents: Will he be able to function normally? Will he be able to contribute to society?
Case #3 continued...

**Results / Recommendations:**

- **Trial with amplification is recommended in at least one ear; Can start with loaner aid and apply for funding**
  - One ear presenting as normal now, profound other ear
  - Parents deferring any type of amplification at this time
- **Ongoing, regular monitoring of behavioral hearing thresholds and discrimination – unaided and aided**
- **Neurological evaluation recommended – rare syndrome diagnosed**
- **Connect with other families – You are NOT alone!**
Case #4

- **Age:** 14 month old female
- **History:**
  - Bilateral severe to profound SNHL, identified at birth
  - No significant benefit from traditional amplification
  - Not walking; Sitting up with assistance; Crawling
  - Stiff and rigid gross motor movements
  - Bilateral clonus; Leg braces
Case #4 continued...

- **Questions / Concerns:**
  - Balance function?
  - Speech/language development?
  - General motor planning issues?
    - Apraxia?
  - Cochlear implant candidate?
Case #4 continued...

- **Results / Recommendations**
  - Consult with pediatric OT regarding motor planning concerns and possible apraxia of speech
    - Diagnosed with apraxia of speech
  - Balance testing – VEMPs – normal bilaterally
  - Consider consultation with physical therapist
  - Proceed with team CI consultation
    - Patient received simultaneous bilateral CIs at 16 months of age
    - Excellent speech understanding; Excellent parent commitment and support.
Case #5

- **Age:** 5 yr old female
- **History:**
  - Bilateral profound SNHL identified at birth, etiology unknown
  - Bilateral CIs placed 2005 and 2008
    - Failure with one ear, re-implanted
    - Excellent receptive language / speech discrimination with CIs
  - Diplegic spastic cerebral palsy that was diagnosed at 18 months
  - History of dysphagia
  - Poor balance and abnormal gait
  - Strabismus – surgically corrected
  - Global developmental delays
  - Walked at 2.5 years, toilet trained at 5 years, speaks in full sentences but is difficult to understand
Questions / Concerns

- Oral motor concerns
- Speech articulation concerns
- Cognition normal?
  - Mother feels that she is “cognitively normal but in a body that doesn’t work so well.” But not sure.
- What will be the best method of communication?
- Are we doing all the right things for our child? Could we be doing more?
Case #5 continued...

- **Results / Recommendations**
  - Referred for general genetic work up – family interested
  - Referred for full developmental assessment to include cognitive testing
  - Continue with current audiologist for CI testing/mapping
  - Continue with both speech/language therapists
    - One for oral motor and the other for speech/language
Contact Information

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Questions