



CASE STUDY ADD, Autism, Central Auditory Processing Disorder, Sensory Processing Disorder in 14-year-old female

Presented by Peg Simon, certified HANDLE® Practitioner, from Judith Bluestone's client notes

These case studies, each submitted by a Certified HANDLE® Practitioner, demonstrate outcomes achieved through implementation of an individualized HANDLE program. The acronym stands for the Holistic Approach to NeuroDevelopment and Learning Efficiency. The HANDLE paradigm for understanding behaviors and their root causes is thoroughly explained in *The Fabric of Autism: Weaving the Threads into a Cogent Theory*, by Judith Bluestone, the creator of HANDLE and the founder of The HANDLE Institute. For intimate insights into client and family experiences of HANDLE, see *The Churkendoose Anthology*, with commentary by Judith Bluestone.

For each of the clients in these Case Studies, the practitioner began with a comprehensive assessment, the findings of which led to a Neurodevelopmental Profile, which in turn formed the basis for a program of activities complex in their neuroscientific premises and very simple to implement. Thereafter the client's program was modified about monthly in accord with changes achieved in the interim. Each client participates in twelve to fifteen activities regularly; the practitioner, in writing up the case study, names those activities in brief without the full details and explicit information each client-family receives in why and how to implement the program. Go to www.handle.org for more information.

Clinical history

General

Client is the only child of well-educated parents. She has a history of ADD, autism, and sensory processing disorder; diagnosed with central auditory processing disorder (CAPD); at time of HANDLE assessment was taking Depakote, Trileptal, Focalin, Celexa, and Seroquel.

Early Health and Developmental History

Mother's pregnancy and delivery were normal, with mild jaundice and some feeding problems at birth. Client suffered numerous ear infections in early childhood. She had high fevers, with febrile seizures and no diagnosed dehydration. All developmental milestones were reported met; reported difficulty/delay with playing ball sports and with rhythm activities.

Nutrition and Current Health

- It was observed at HANDLE assessment that client has pudgy feet and generally tight skin, and cannot tolerate closed shoes—wears flip flops only. Client has nocturnal enuresis. She is

a fussy eater, does not drink much water, and prefers chocolate and cola. She is under the care of a psychiatrist specializing in autism. She was seen for suspected sleep apnea, but did not meet criteria for diagnosis; went to school for special children for elementary years; had many years of sensory processing disorder therapy; will continue speech therapy in group setting.

Placement

At time of assessment, client was entering seventh grade at a public junior high School.

Participation in HANDLE® Program Referral Concerns

Client's mother came to a HANDLE informational presentation, and subsequently set up appointment for her daughter. The referral concerns were as follows:

- Educational concerns: dealing with transitions in junior high; organizational skills; auditory processing; writing.
- Social concerns: social ability is limited in

negotiating and compromising in a group; has no friends.

- Specific perceptual and/or processing concerns: CAPD, Sensory Integration Disorder, Attention, Hyperactivity, Visual Perception, Autism.

Findings

Initial Assessment: Sept. 7, 2007

Client is hypersensitive to most light touch, with tactile sensitivity limiting food choices; she also blocks pain sensation. Grinds teeth at night, and needs to chew ice or gum, indicating trigeminal nerve is disorganized. Lymph is not flowing well, causing tight skin and puffy feet with easy bruising.

Vestibular system disorganized. Client requires stimulation (likes to spin, jump, etc.) to focus, falls asleep in moving car or when overheated; dizziness is a factor during movement if wearing glasses (for near point vision). Her muscle tone is mildly diminished, and differentiation not complete (there is mild overflow to mouth when tracking and startles to unexpected sound). Auditory sequencing challenged by guttural sounds (problematic at 4 syllables).

Proprioception is compromised (requires mother beside her in order to fall asleep). She often bumps into things on path.

Visual Systems: Ocular motility is challenging as sustained tracking leads to mild nystagmus—client prefers to move head or body instead. Binocularity not fully established as left eye tends to over-converge, and she sometimes closes left eye to focus. There is mild light sensitivity.

Lateralization: right side dominance with mild left side weakness and lack of synchronicity seen between right and left hemispheres.

Higher order functions: Receptive language challenged by auditory sequencing difficulties and by client's limited ability to read non-verbal communication. Written expressive language compromised; time management and organization challenging; reading comprehension also compromised.

Observed strengths: visual perceptual constancy; motor planning; oral expressive language (relative strength); kinesthesia.

Other notes: Client has difficulty in modulating voice and gets easily upset/angry. Mother felt need to calm her during assessment.

Initial HANDLE Program

Client was given an initial HANDLE program to address the referral concerns by organizing and strengthening the disorganized/weak systems described in the findings.

The program consisted of:

- Crazy Straw and Blowing activity to enhance the visual functions, auditory functions, interhemispheric functions, and muscle tone; in addition, Crazy Straw was given to aid with controlling enuresis;
- Buzz Snap (hands, face, feet) to enhance muscle tone, proprioception, and to help get energy moving;
- Face Tapping to enhance interhemispheric functions, tactility, differentiation, auditory functions, and muscle tone in the face;
- Skull Tapping to enhance interhemispheric functions, tactility, auditory functions, and to improve oxygen flow to the brain;
- Kneading Feet to address the lymphatic system flow, vestibular system, and auditory functions;
- Chocolate Ears to enhance auditory functions, vestibular system, and to improve digestion;
- Crossed Arm Bounce to enhance interhemispheric functions and differentiation;
- 2-Finger Spinal Massage to aid the autonomic nervous system in calming;
- Ball Back Roll and Side to Side tips to enhance the vestibular system, auditory functions, visual functions, interhemispheric functions, proprioception, and muscle tone;
- Spinal Twist to aid with vestibular system, auditory functions, interhemispheric functions, proprioception, and digestion;
- Peacemaker Massage to enhance proprioception, tactility, and muscle tone along with aiding in calming.

Additional suggestions were made to begin supplementing with Omega 3 fatty acids to balance the 3-6-9 EFAs, and to increase water intake while decreasing caffeinated food/beverage intake.

Program Review/Reassessment Visits

Activity Check: Sept. 11, 2007

Family report: The activities have been done for the 3 days since seen at assessment.

Clinician's observations: Feet less puffy.

Program revisions: Further instructions given on Ball Back Roll and Side to Side Tips re the number of repetitions and what to gauge increases by. Increase amount intense sucking with Crazy Straw. Guidance given on more accurately doing several of the activities. Adaptations made in Crossed Arm Bounce. Added Jiggle Bridge to further enhance energy flow and digestion.

Program Review #1: Oct. 16, 2007

Family report: Has girl friends for first time; enuresis stopped completely; no longer needs or wants mom in bed with her to fall asleep; less need for chewing. Activities being done regularly.

Clinician's observations: Feet not as puffy, less bruising; lymph is beginning to flow better. Improvements seen in proprioception, interhemispheric functions, tactility, vestibular system, auditory processing.

Program revisions: Side to Side Tips—focus on small object. Crossed Arm Bounce—4 bounces “reading objects.” New activities: Sunrise-Sunset; Reflexology diaphragm stretch. Discontinue Chocolate ears and generalized blowing. On hold: Peacemaker Massage. Continue the others.

Program Review #2: Feb. 25, 2008

Family report: Client has begun to react to pain; has friends and normal problems with them; sleepover at friend's house with 5 others and no need to prep host family; organization skill is improved but still somewhat challenging for long term projects.

Clinician's observations: Visual tracking smooth; convergence accurate; bimanual circles and triangles synchronous and symmetrical; feet less puffy and can wear closed shoes now; handwriting precise, easy to read, and fluent. Client carries on meaningful conversation during session and is able to modulate voice appropriately and show appropriate expression on face.

Program revisions: Introduced Hula Bounce to

address long-term organizational needs. Discontinue Buzz Snap Face, Buzz Snap Hands and Feet, 2-Finger Spinal Massage, Peacemaker Massage, and Jiggle Bridge.

Outcomes

Summary:

Client is now functioning well in school and appropriately in social situations. Enuresis stopped completely.

- Social concerns of limited social ability and lack of friends are met. Client has friends and is able to work things out with them normally — can apologize for overreacting, or friends can apologize for hurting feelings. She is able to sleep on own and no longer needs or wants Mom in bed with her.
- Educational concerns of transitions, writing, and CAPD met. Organizational skills improving but still needs help for long-term projects. Generally, school is much better. Handwriting is precise, easy to read and fluent. She now has 4 regular teachers out of 6. New activity given to accomplish the goal of improved organization and timing.
- Perceptual and processing concerns: Visual tracking is smooth and convergence is accurate. Hemispheric synchronicity resolved. Facial expressions are all appropriate, and she is able to read and respond to non-verbal communication. Physical sensations more organized and emotional feelings in normal range. Tactility issues mostly resolved, and has begun to react to pain. Feet less puffy, with less bruising. Wears closed shoes with ease.

Future plans

Client is enthusiastic participant in therapy and wants to become a therapist and invent activities herself. Client will continue with maintenance program as needed.

What Makes This Case Unique

This client had received many years of therapy and had been in a special needs school for her elementary years, yet when seen was not able to function appropriately socially or academically. In addition, nocturnal enuresis was still a nightly problem. This client was seen four times over

nearly six months and her HANDLE program was revised three times. At the exit interview she was functioning appropriately both socially and academically, and presented as a neurotypical (and very bright) 14-year-old, able to have friends and even sleep over without any special arrangements with host family. Nocturnal enuresis was completely resolved. Academic concerns, including CAPD, were corrected, with long-term organizational skills still being addressed. Both the length of time the client's problems had persisted and the relatively short time of the HANDLE program in resolving the majority of the concerns are notable. Also notable is the very full recovery made.

Update

Client's behaviors/symptoms leveled off for a long enough period of time that both her neurologist and psychiatrist agreed to begin weaning her from her medications. On April 30, 2009, her mother reported that in the last six months, with the supervision of client's neurologist and psychiatrist, she has been weaned off of Depakote and Trileptal with no ill effects. Next they hope to wean her off of Seroquel.

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The HANDLE Institute presents these case studies to demonstrate the successes of the HANDLE approach and pique the interest of researchers and funders in engaging in clinical studies to further examine the efficacy of these interventions. For more information about The HANDLE Institute, go to www.handle.org .



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