Western Office of Interprofessional Health Education & Research

Case of Ruth Simmons

Mrs. Ruth Simmons is a right-handed, 65-year-old, English-speaking widow who lives alone in her own home in Charlottetown, PEI. Her house is a two-storey single-family home. The kitchen, living, and powder rooms (ie. 2 piece bathroom) are on the main floor, the laundry and storage facilities are in the basement, and the bedroom and full bathroom are on the second floor. Mrs. Simmons drives her own car. She enjoys needlework and reading, and is an active member of a local handicraft guild.
Mrs. Simmons has two adult children. Her daughter, who lives in Manitoba, phones weekly to talk to her mother. Her son lives in Charlottetown, but Mrs. Simmons only has contact with him once of twice per month.

Medical Information
Mrs. Simmons called 911 in the early morning hours of May 6th after discovering that she was having difficulty walking and speaking. She was admitted to a primary care hospital on May 6th. She was diagnosed with a left anterior occlusive cerebral vascular accident (CVA). Mrs. Simmons suffers from hypertension and is taking prescribed diuretics. She also is taking hormone replacement medication (i.e., estrogen).

Four days post-admission, the first Stroke-Rehabilitation Team meeting took place to discuss Mrs. Simmons's case. Members of the team included the physiatrist (ie., medical specialist in rehabilitative medicine), a nurse, an occupational therapist, a physiotherapist, a speech-language pathologist, a neuropsychologist, a social worker, a dietitian, and a recreation therapist. Team members agreed that multiple assessments of Mrs. Simmons's abilities and deficits were necessary including those by the speech-language pathologist, the occupational therapist, the physical therapist, and the social worker. Additional consults for screening of skills were requested by the case manager for audiology, recreation therapy, podiatry/orthotics (shoe fitting, foot lifts, arch supports, etc.), and neuropsychology.

During the first week post-admission, Mrs. Simmons was assessed fully by the speech-language pathologist, the occupational therapist, the physical therapist, and the audiologist. Their reports follow.

ASSESSMENT REPORTS

Audiology

Name:	Ruth Simmons	Date:	May 18th
Address:	Charlottetown, PEI	Age:	65 years
Phone:	(902) 661-xxxx	Physician:	Dr. A. Wyle

Mrs. Simmons was referred to the audiology department by the hospital speech-language pathologist following a post-CVA assessment. On May 6th, Mrs. Simmons suffered a left anterior CVA, resulting in right hemiparesis, expressive language problems consistent with Broca's aphasia, and mild receptive language difficulties. Mrs.

Simmons's daughter, who lives in Manitoba, was present during the assessment. Previous audiometric results and relevant auditory history have not been obtained from Mrs. Simmons's family physician. The daughter reported that her mother has no known hearing problems. Mrs. Simmons speaks with her daughter regularly on the phone without difficulty.

Pure tone air and bone conduction thresholds were conducted with fair reliability and indicated a mild bilateral sensorineural hearing loss, with further decreased sensitivity in the high frequencies. Speech detection thresholds were obtained with fair reliability and indicated a slight loss of sensitivity. Discriminating testing was not attempted.

Cursory otoscopic examination was essentially unremarkable. Acoustic immittance procedures indicated normal middle ear function bilaterally. Acoustic stapedial reflexes were present at normal levels bilaterally on both ipsi- and contralateral stimulation.

Tone decay measures and acoustic reflex decay measurement were conducted. These tests were negative, suggesting no evidence of eighth nerve pathology.

Summary
Test results indicate a mild loss of hearing sensitivity bilaterally sufficient to cause communicative difficulty in normal conversational situations and considerable difficulty in noisy or reverberant conditions. These results are consistent with the speech-language pathologist's report of mild receptive problems and reports of communication problems with health care personnel in the hospital.

Recommendations
1. Health care personnel and family be advised of communication strategies necessitated by hearing loss.
2. Use of an assistive listening device such as the "Pocket Talker" by staff while Mrs. Simmons remains in the hospital.
3. Return for further assessment in three months.

Occupational Therapy
Mrs. Ruth Simmons suffered a L CVA with R hemiparesis one week ago.
ADL
- Feeds self independently once tray prepared
- No swallowing difficulties noted
- Washes self independently once set up in chair at bedside, except requires assistance of 1 staff to stand for peri-care
- Requires assistance for most aspects of dressing; to fasten bra, do buttons, put on and fasten shoes and socks, stand to pull up pants

Mobility
- Transfers with assist of 1 staff
- Able to propel wheelchair short distances
- Ambulates with assistance of a therapist
- Sitting balance poor, needs chair with armrests and supervision to reach down to feet
- Standing balance poor

Upper Extremity Mobility

- R hand is swollen, passive flexion of interphalageal (IP) joints limited
- R arm Brunnstrom stage 1

Psychosocial Issues

- Becomes frustrated over expressive communication problems
- Comprehension seems inconsistent
- Expresses concerns about her health and future
- Widow with 2 children
- Speaks with daughter in Manitoba every week or ten days by telephone
- Calls son weekly, but he is not always in and rarely returns calls, so she speaks with him approximately every two weeks and sees him monthly (invites him to dinner)
- Has a number of friends and neighbours whom she says she could ask for assistance, but she prefers to be independent or to offer help to others

Client Goals

1. She wants to return to living alone in 2 storey house (laundry in basement, powder room ground floor, bedroom and full bathroom on second floor).
2. She wants to continue driving
3. She wishes to continue leisure interest in needlework

Plan

1. See her 30-45 minutes daily on an individual basis in OT
2. See her twice weekly on the unit in the morning for activities of daily living (ADL) training

Physical Therapy

Mrs. Ruth Simmons was first seen in the acute stage of her illness in the physical therapy setting of the primary care hospital. Assessment of her physical and functional status was completed.

Mrs. Simmons demonstrated significant weakness in the right limb muscles. The upper limb showed flaccidity due to the paresis present – with an inability to resist gravity. The lower limb was not capable of full weight-bearing and there was a flexed knee posture present. For the trunk, strength of forward flexion was impaired.

Balance in upright standing also was impaired with an asymmetrical stance to the non-affected side; the client required a wheelchair for effective mobility. Trunk stability was poor in the anterior/posterior direction.

There was complaint of pain in the right shoulder area. Due to the swollen, flaccid nature of the right upper limb, there was some evidence of developing subluxation of the glenohumeral joint.

Client Goals

1. use of affected limbs, as much as future muscle tone allows
2. regain standing balance, and independent walking ability

3. reduce shoulder discomfort

Speech-Language Pathology

Mrs. Simmons was first seen in the acute stage of her illness on May 9th, three days after her admission. She was visited first in her room for a preliminary bedside examination. She was then seen in the speech-language pathologist's office for three, 1.5 hour assessment sessions over the next 3 days.

Standardized and non-standardized speech and language assessment tools were administered to identify the nature of her speech and language problems and to help establish goals for therapy. These include the:

- Western Aphasia Battery (Kertesz, 1982)
- Revised Token Test (McNeil & Prescott, 1978)
- Boston Naming Test (Kaplan, Goodglass & Weintraub, 1983)
- Action Naming Test (Obler & Albert, 1986)
- Apraxia Battery for Adults (Dabul, 1979)
- Functional Assessment of Communication Skills of Adults (Frattali, Thompson, Holland, Wohl, & Ferketic, 1995)
- Bedside speech and language examination (non-standardized)
- Oral peripheral examination

The results from the detailed language and speech assessment revealed that Mrs. Simmons exhibited a mild-to-moderate Broca's aphasia, moderate apraxia of speech (ie. Verbal apraxia), and moderate oral apraxia (non-verbal apraxia). Mrs. Simmons's expressive language skills (i.e. spoken and written) were more impaired relative to her mildly impaired receptive language skills (i.e., listening and reading comprehension).

Mrs. Simmons also showed difficulty speaking as a result of her apraxia of speech. She spoke in short, poorly articulated phrases, which contained mostly nouns, verbs, adjectives, and adverbs (i.e., content words). She made several attempts to produce words and phrases correctly, often exhibiting errors in which sounds were substituted, distorted, or omitted on an irregular basis (i.e., paraphasic error). She was frustrated by her inability to say words clearly, as well as by the inconsistency in the accuracy of her speaking.

Client Goals:

1. Mrs. Simmons wants to be able to speak more clearly on a regular basis;
2. Mrs. Simmons wants to be able to use more words in her sentences;
3. Mrs. Simmons wants to use words more accurately in her sentences.

Adapted from Case Studies in Gerontology for the Applied Health Sciences: An Education Resource developed by J.B. Orange, S. Hobson, M.F. Cheeseman, A.A. Vandervoot, and M.E. Black, July, 1997.