

## Case Study – The Listening Program®

### Z.G., Age 54, Stroke

Submitted by: Mindy Newhouse, M.S. CCC-SLP  
Communication Matters, Thousand Oaks, CA  
October 31, 2001

Name: Z.G.

Gender: Female

Chronological Age: 54

Clinical Diagnosis: Aphasia, apraxia, dysphonia. Post Stroke: aneurysm and stroke in 1993, a second stroke in 1998, and a third stroke on July 29 of 2001.

### BACKGROUND INFORMATION

Z.G. was initially evaluated on August 9, 2001. Z.G. has had three strokes. The first was an aneurysm and stroke in October, 1993. After the first incident, Z.G. reportedly received rehabilitation for one year and was able to return to work. She had another stroke five years later in October of 1998 that left her with aphasia (language disorder), apraxia (motor planning disorder), and dysphonia (voice disorder). She was reportedly unable to return to work despite rehabilitation. Z.G. had a third stroke July 29, 2001. She later reported that just prior to her third stroke she had begun to occasionally hear her "old" voice break through. All writing was done with her non-dominant (left) hand. She was unable to use her right hand functionally following the stroke in 1998. Z.G. used a motorized wheelchair (Zippy) to get around in and outside of her home.

### TREATMENT

We began one month of traditional speech therapy on August 9, 2001. Initial testing utilized the Aphasia Language Performance Scales which has four subtests: Talking, Listening, Reading, Writing. This test is normed on brain injured adults, and scores of "10" may occur despite subtle deficits.

On Sept 5, I re-administered the ALPS. The client had made substantial gains, as expected in a traditional program during the first month post-stroke.

A comparison of Z.G.'s ALPS scores follows:

	<u>Aug 9, 01</u>	<u>Deficit Rating</u>	<u>Sept 5, 01</u>	<u>Deficit Rating</u>
Listening	4.5	Moderate-Severe	7.5	Mild
Talking	5.0	Moderate-Severe	7.5	Mild
Reading	3.0	Severe	7.5	Mild
Writing	5.0	Moderate-Severe	7.5	Mild

### PROGRAM IMPLEMENTATION

The client began The Listening Program on Sept 15, 2001 following the Base Schedule of 15 minutes twice a day.

On Sept 11, Z.G. had written in her journal: "Today our world was changed for ever. We attacked today in New York and Washington and Pennsylvania 4 planes total. Plane's attack world Trade Center. What a sad, sad, day."

On Sept. 17th, two days after beginning TLP, Z.G. rewrote her feelings about the 9-11 events. She wrote a beautiful 8-paragraph account with a substantial difference from her first account. Her journal rewrite begins: "This morning I was awakened by a phone call @ about 8:30 A.M. by terrible news. I turned on my TV set to witness this horrific site.

#### Attack on America

"As I watched on, as New York scenes were being ripped apart. The Twin Towers were being attacked by our own passenger planes. Then watching our peace and tranquility disappear as thousands of innocent people lose their lives. "First one tower, the 2nd as we watched in horror, Plane #2 attacking the 2nd tower..."

Z.G. has continued to make amazing progress.

September 22 was her breakthrough. One week after beginning TLP, Z.G.'s voice came back. Up until that point, she was unable to coordinate her breath support and phonation. It had been nearly 3 1/2 years since she had had her true voice. Her language abilities also broke through. In her journal on September 22nd she wrote: "Great news. Today I heard my voice sound as it used to for the 1st time in 3 years. I am so happy I want to celebrate!! Maybe I should go and buy a mansion or an Island, go to the moon, kiss a stranger, hug the mailman, kiss a frog... Wow! Am I happy!!"

After going out to buy a new journal and pens on the 22nd, Z.G. wrote in her journal in cursive handwriting rather than printing. This was her first handwriting since her July 2001 stroke. She was still using her non-dominant hand, however.

On September 28th, Z.G. wrote: "This is the end of the 2nd week (of TLP). I feel that so many things have changed so far. I even think that I am a little calmer than before I started. People who call me don't believe it's me on the phone, that makes me very happy. I believe that the changes in me are all related and tied into the program. After completing the 2nd week I truly believe that if not for this program I would not be doing the things I'm doing now."

During weeks 3-8, Z.G.'s improvement was significant; she met all of her speech therapy treatment goals. Although I was no longer seeing her 2-3 times per week in her home, I was speaking to her on a weekly basis. Z.G. continued to experience more and more successes during the remaining 6 weeks, including physical breakthroughs. Z.G.'s balance was so bad she had not been able to stand since her 3rd stroke, even with support. Then, during the 3rd week of TLP, she was able to stand up for the first time. Her physical therapist called me, and immediately made an appointment to sample the program personally. She even purchased TLP for her daughter.

By week 6, Z.G. was beginning to use her walker inside her home, and began to use her previously dominant (right) hand functionally. Her voice continued to become stronger and stronger, and her grammar in writing and during conversational speech continued to improve. Z.G. not only began to print with her right (dominant) hand, she began to use cursive writing.

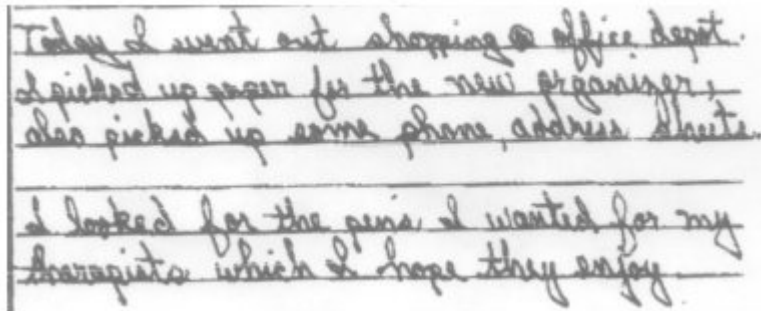
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	<u>Post TLP</u>	<u>Deficit Rating</u>		
Listening	9.5	Minimal Impairment		
Talking	10.0	Minimal Impairment		
Reading	9.5	Minimal Impairment		
Writing	10.0	Minimal Impairment		

Note: Her reading score improvement post TLP was unusual as Z.G. has had visual impairment as well.

Dictated  
ASE - WTAC Mooh  
(nose) (watch) (mouth)

After 2 Weeks of TLP - 9/29/02



Today I went out shopping @ office depot.  
I picked up paper for the new organizer,  
also picked up some phone, address sheets.  
I looked for the pens I wanted for my  
therapists which I hope they enjoy.

#### SUMMARY OF CHANGES

After her first round of TLP, Z.G. was functioning at a level higher than she had been even prior to her most recent stroke. Most significantly, her voice, speech, and language abilities came back. She still has physical limitations and relies on a wheel chair but is now able to stand and get around with a walker. After finishing her first round of TLP, Z.G. went to see her primary doctor who called me as soon as Z.G. left the office. "I've know her for many years," she said, "and I haven't seen her like this for 3 1/2 years." Since then her doctor has sampled TLP and referred another stroke patient to me.

#### FOLLOW-UP RECOMMENDATIONS

After 8 weeks of TLP, Baseline Schedule, Z.G. listened to 2 weeks of the TLP Extension, Speech and Language. She has repeated TLP 1-8, Base Schedule four times so far. For maintenance, ZG listens to selections from Sound Health as well as TLP Extensions, High Spectrum and Speech and Language.

#### DISCUSSION

After seeing and hearing Z.G.'s progress, her ex-husband offered to pay a portion of her expenses for TLP and bought one for himself!

I have used TLP with four other stroke patients since Z.G. They were referred to me when other therapists had discharged them because their progress had reached a plateau. All have made measurable progress with the help of TLP.

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End of Case Study



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