

(SAMPLE REPORT: VOICE EVALUATION)  
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July 22, 2002  
VOICE EVALUATION

NAME:	Helen E	D.O.B.:	03/17/44
ADDRESS:	12 Center St	Age:	58
	Satsuma, AL 35555	D.O.E.:	07/22/02
PHONE:	987-6543	REFERRAL:	Dr. Fred Silver
PATIENT #:	EXXXX0000	COMPLAINT:	Hoarseness

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HISTORY INFORMATION

This patient is a 58-year-old female that was referred to this clinic by Dr. Fredrick Silver. Her primary complaint was hoarseness. Ms. E received voice therapy from this clinic in June 2000 for chronic hoarseness. Her voice problems resolved after that therapy, and she did not experience further problems until May 2002. In June of 2002 she was seen by Dr. Silver, who reported redness and irritation in the laryngeal mechanism. He recommended vocal rest for three weeks. After vocal rest, she was reevaluated by Dr. Silver, and no improvements were noted.

Ms. E noted that she experienced sudden onset of her current voice problems as she was singing with her church choir. She described her problems as follows: raspy voice, voice cuts out, and throat feels dry. Ms. E is a preacher and sings with her church choir. When questioned about the use of her voice, she reported that she preaches three times a week and sings approximately five to eight hours a week. She has found her voice impairment particularly troublesome when she preaches and sings. She has been unable to sing with her choir group since the onset of this voice problem in May. Ms. E stated that she drinks a lot of water, does not smoke, and is currently taking the following medications: Metoprolol, Nitrostat, Zyrtec, Zolofit, Carisoprodol, Darvect, Flonase, Premarin, Pravachol, Isordil, Arthrotec, Diclofenac. Ms. E reported that she has used the Flonase spray on a daily basis for the past two years. She also reported the following medical conditions: Rheumatoid Arthritis, Fibromyalgia, Osteoporosis, Hypoglycemia, Diverticular disease, Mitrovalve prolapse.

EVALUATION RESULTS

A perceptual voice evaluation was conducted to determine the quality of Ms. E's voice. Her voice was noted to be moderately rough with fluctuations in frequency and amplitude. Her voice was characterized by slight hoarseness, breathiness, weakness, and strain. An s/z ratio was measured and calculated to be 1.49, which is indicative of voice pathology. When asked to prolong a vowel sound, Ms. E was able to prolong voicing for an average of 4.9 seconds, which is well below what would be expected of an individual with a normal voice (approximately 20 sec.). The Voice Handicap Index and Reflux Index were also used for this evaluation. Ms. E's total score on the VHI was 39, which indicated a moderate handicap. Her Reflux Index score indicated signs of possible reflux.

An acoustical evaluation was also performed using the Visipitch. Results were as follows:

Fundamental Frequency	161 Hz
Jitter (frequency perturbation)	.685%
Shimmer (amplitude perturbation)	5.54%
Noise to Harmonic Ratio	1.62Hz

The acoustical information taken from the Visipitch indicates that Ms. E's fundamental frequency is below normal limits for a female of her age (200-250 Hz). There was excessive variability in amplitude as evidenced by shimmer values, and the noise-to-harmonic ratio was also above normal limits. Measures of frequency perturbation were within normal limits.

### CONCLUSIONS

Results of the evaluation revealed a voice disorder characterized by hoarseness secondary to functional and possibly organic causes. Functionally, over activation (e.g., excessive tension) of the muscles (e.g., diaphragm, intrinsic laryngeal muscles) appeared to be leading to increased strain/effort of the vocal folds. Ms. E is also required to use her voice extensively in her profession for speaking and singing, which places high demands on her laryngeal mechanism. Her voice problems could be further complicated by her use of Flonase. Flonase contains a steroid, long-term use of which has been linked to hoarseness.

### RECOMMENDATIONS

1. The patient should attend therapy with a focus on decreasing laryngeal muscle tension and appropriate respiratory patterns.
2. The patient should consult with Dr. Silver concerning the continued use of the steroid nasal spray.
3. The patient should consider enrolling in professional singing lessons to increase her ability to sing while putting minimal strain on the vocal folds.

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Graduate Student Clinician

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Nita James, Ph.D., CCC-SLP  
Speech-Language Pathologist

Claire Harrison, B.A.  
Graduate Student Clinician

cc: Ms. E  
Dr. Silver