COMPREHENSIVE SPEECH TREATMENT PROGRAM FOR PATIENTS WITH PARKINSON’S DISEASE (CPD): A PILOT STUDY

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INTRODUCTION

Dysphagia and dysarthria are common in patients with Parkinson’s disease (PD)

- Dysphagia: Life-threatening; impact quality of life
- Dysarthria: Hinder communication with others; Impact quality of life

Lee Silverman Voice Treatment (LSVT)

- Commonly used speech training program for PD patients
- Evidence-based treatment
- 16 intensive sessions within 4 weeks
- Difficult to implement in local outpatient settings
Objective & Method:

Objective:
- To develop an effective speech treatment program for PD patients

Method:
- 9 PD patients
- 10 speech treatment sessions in RTSKH ST OPD
  - weekly/biweekly & individual/group basis
  - adapted the content of LSVT: Think loud, speak loud!
- Pre-treatment & Post-treatment outcome measures
  - Voice Handicap Index-10 (VHI-10)
  - maximum loudness in sustained phonation (dB)
  - Therapy Outcome Measure (TOM) of dysphagia
RESULTS

Fig. 1 Maximum loudness in sustained phonation
• pre-treatment vs post-treatment ($p<0.05$)
• pre-treatment vs half-year review ($p<0.05$)
• post-treatment vs half-year: no significant difference

Fig. 2 VHI-10 score
• pre-treatment vs post-treatment ($p<0.05$)
RESULTS & CONCLUSION

CONCLUSIONS
- CPD significantly improved PD patients’ vocal loudness, perception towards their voice problem and severity of dysphagia
- The increased loudness could be maintained 6 months post-treatment

PUBLIC HEALTH IMPLICATIONS
- More PD patients can be benefited with CPD
- More cost effective with group training
- Future studies with larger sample size

Fig. 3 Therapy Outcome Measure of dysphagia
- pre-treatment vs post-treatment (p<0.05)