## RECOVERY FROM HEAVY VOCAL LOADING IN WOMEN WITH DIFFERENT LEVELS OF FUNCTIONAL VOICE PROBLEMS

Susanna Whitling<sup>1</sup>, Viveka Lyberg-Åhlander<sup>1</sup>, Roland Rydell<sup>1, 2</sup>
1: Department of Logopedics, Phoniatrics and Audiology, Faculty of Medicine, Lund University, Sweden 2: Ear, Nose and Throat division, Skåne University Hospital, Lund, Sweden susanna.whitling@med.lu.se

Objectives: Track recovery time following a vocal loading task imposing vocal fatigue. Explore if patients with functional dysphonia are worse affected by vocal loading and if they take longer than others to recover.

Methods/design: Longitudinal, case-control, clinical trial. Fifty (n=50) female participants in four vocal subgroups on a spectrum of everyday vocal loading and functional voice complaints, including n=20 patients with functional dysphonia, took part in a clinical vocal loading task, inflicting vocal fatigue through loud speech in ambient noise. Short-term recovery was explored through self-assessment of unspecified voice problems every 15 minutes for two hours following loading. Long-term recovery was tracked through self-assessments of specific voice symptoms during 3 days following vocal loading. Effects of heavy vocal loading were evaluated through voice recordings, long-time average spectra, perceptual assessments and assessments of digital imaging performed pre and post vocal loading.

Results: Patients with functional dysphonia did not return to baseline for unspecified voice problems within 2 hours of vocal loading and they were worse affected by vocal loading than other groups. Women with high everyday vocal loading with no voice complaints identified vocal loading more evidently than other groups. Long-term recovery took 7–20 hours for all groups.

Conclusions: Short-term recovery is slower for patients with functional dysphonia and they are worse affected by a vocal loading task than others.