

Voice rest after vocal fold polyp surgery?

A study of 588 patients in the Swedish National register for voice improving vocal fold surgery

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Background

Total voice rest is commonly recommended after vocal fold polyp surgery. However there is no consensus regarding optimal type or duration of postoperative voice rest (Fig 1).

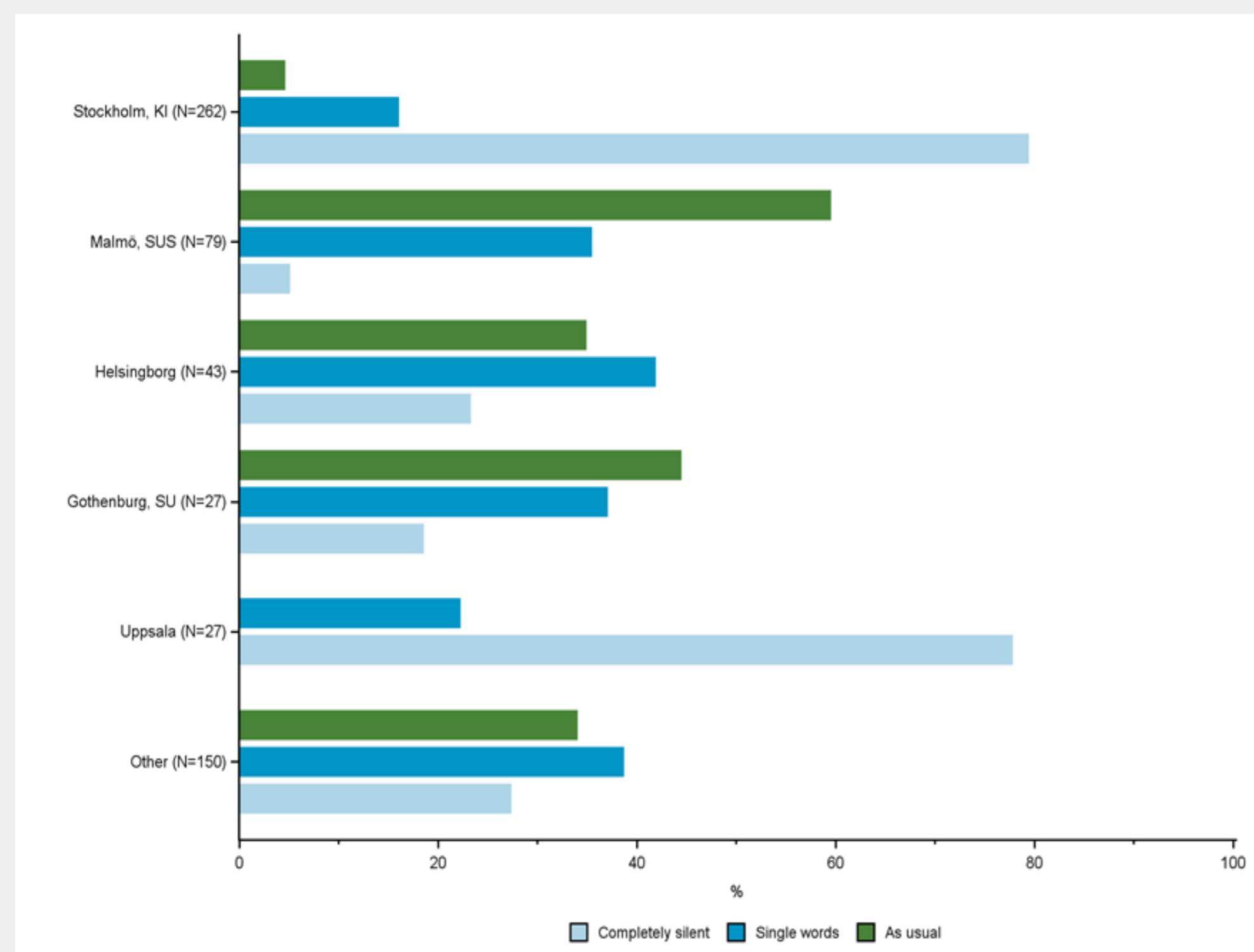


Fig 1. Patient-reported voice rest after microlaryngeal surgery performed at the five largest ENT clinics in Sweden

The studies published so far are either from surveys around clinicians or on a limited number of patients with different surgical methods used and with different diagnosis¹⁻⁴.

Objective

The aim of the present study was to evaluate the significance of voice rest on patient-reported voice outcome after vocal fold polyp surgery. Data from the National Swedish register for voice improving vocal fold surgery was used and analyzed.

Material and Methods

588 patients which were operated for vocal fold polyps at different ENT clinics in Sweden between April 2008- Dec 2018 reported information about type of voice rest. The different categories were; speaking as usual, using single words or complete voice rest for a few days after surgery.

Subjective voice outcome was graded as; much better, better, no difference, worse and much worse 4 months after surgery. Voice improvement was defined as voice scored as better or much better by the patient. Data were also available about gender, age and VHI-10.

Results

Voice outcome after surgery was analyzed between the group who spoke single words and as usual, versus the group who had total voice rest. No significant difference was found between degree of satisfaction regarding

the voice rest groups. High age and low VHI-10 scores before surgery were correlated to a higher risk of not being satisfied with voice outcome. Gender were not correlated to a higher risk (Table 1).

When analyzing pre- and post-operative mean VHI-scores between the voice rest groups (complete silence, spoke single words, spoke as usual) with an ANCOVA-model the biggest difference was found in the group speaking as usual compared to the group speaking single words. Total VHI-scores are shown in figure 2.

Factor	p
Age at surgery	0.0210
VHI (total) before surgery	0.0349
Gender (women vs men)	0.7644
Voice group (Spoke single word or as usual vs total voice rest)	0.7141

Table 1. Logistic regression model with relative risk for NOT being satisfied with voice outcome 4 months after surgery.

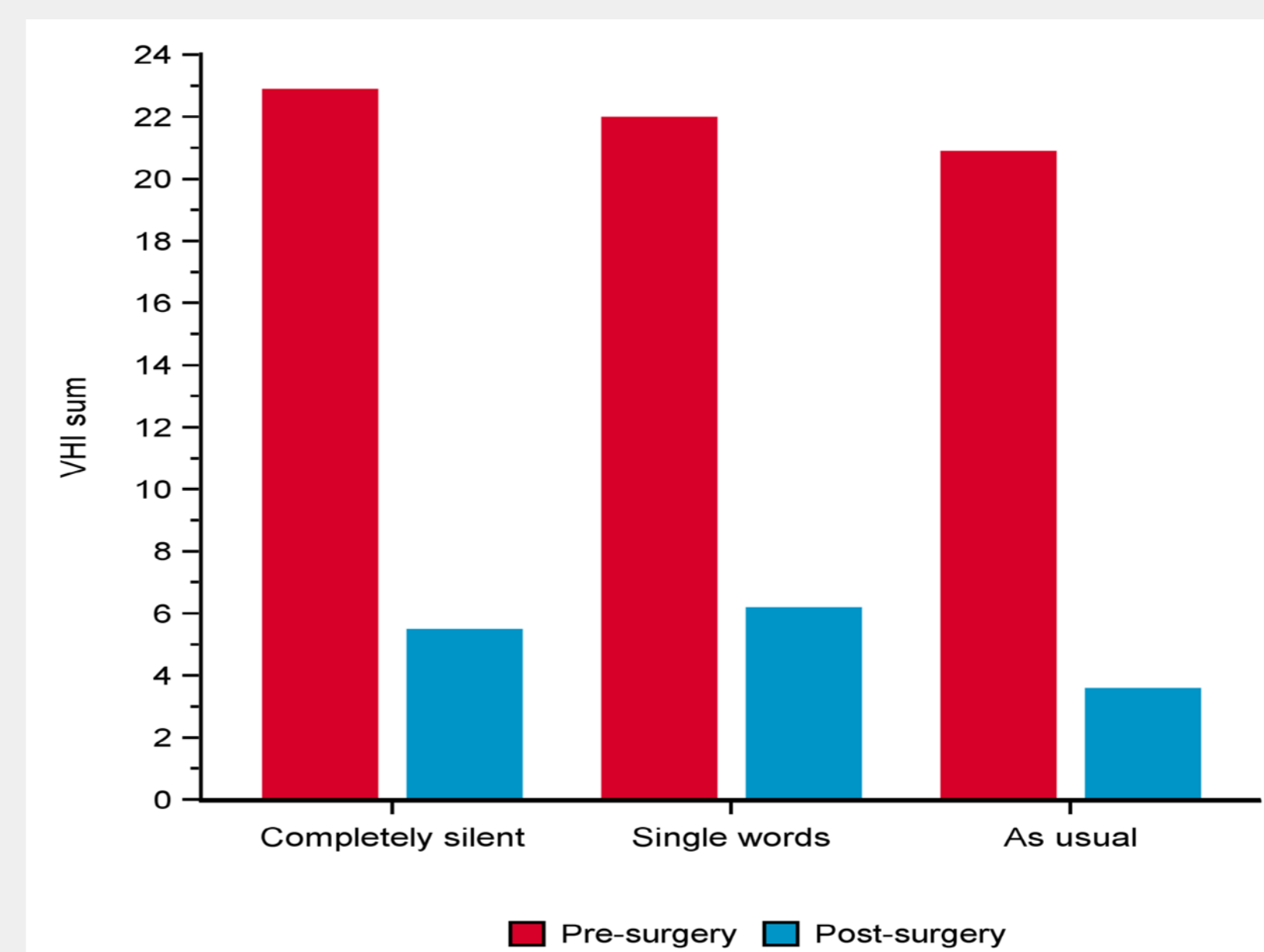


Figure 2. VHI total score before (red) and after (blue) surgery dependent of vocal usage after surgery.

Conclusion

This study did not show any significant positive effect on self evaluated voice outcome 4 months after vocal polyp surgery in the group with total voice rest as compared to relative or no voice rest.

References:

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