



Nose- and sinus-related quality of life and GERD

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ABSTRACT

Though some data indicates an association between gastroesophageal-reflux disease (GERD) and upper airway inflammatory disease, a connection between GERD and chronic rhinosinusitis (CRS) is a matter of controversy in today's medicine.

The aim of this study was to find out whether patients with GERD have a different nose- and sinus-related quality of life compared to a control group.

77 patients with GERD diagnosed by gastroscopy were evaluated regarding their nose- sinus-related quality of life. It was scored by using the Sino-Nasal Outcome Test- 20 (SNOT-20). Total SNOT-20 score was compared with a control group consisting of 480 teachers.

The average total SNOT-20 score in patients with GERD was 22,1 in the control group 9,4 (p< 0,05). In the patient group, the median was 17,00 and standard deviation 18,35 corresponding to 5,00 and 11,46 in the controls. The 95 % confidence interval in patientgroup was (18,0- 26,3) and (8,3- 10,4) in control group.

Patients with GERD have a reduced nose- and sinus-related quality of life compared to a control group based on the fact that they have a significantly higher total SNOT-20 score than the controls. Accordingly, this study indicates that there is a causal relationship between GERD and CRS.

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INTRODUCTION

It is more than 50 years since a potential link between the gastro intestinal tract and sino nasal disorders was suggested for the first time. However, it is only recently that the field has been explored scientifically

Though some data indicates an association between gastro esophageal reflux disease (GERD) and upper airway inflammatory disease, a connection between GERD and chronic rhinosinusitis (CRS) is a matter of controversy in today's medicine. The aim of this study was to examine whether patients with GERD have a different nose- and sinus-related quality of life compared to controls. It is a questionnaire-based survey.

METHODS AND MATERIALS

77 patients with GERD diagnosed by gastroscopy were evaluated regarding their nose- sinus-related quality of life. It was scored by using the Sino-Nasal Outcome Test- 20 (SNOT-20). Total SNOT-20 score was compared with a control group consisting of 480 teachers. Comparison of total SNOT-20 scores between the two groups were done using the Mann-Whitney U test, a non parametric alternative of independent t test. Two-sided p-values less than 0,05 were considered to be statistically significant

RESULTS

Of the 100 patients asked to participate in the study 100% completed participants. 77 patients were diagnosed to have GERD, and they where included in the study.

The median total SNOT-20 score in patients with GERD was 16,1 and in the control group 5,0 (p< 0,0005). In the patient group, the average was 21,1, and standard deviation 18,35 corresponding to 9,4 and 11,5 in the controls. The 95 % confidence interval in the patient group was (18,0- 26,3) and (8,3- 10,4) in the control group.

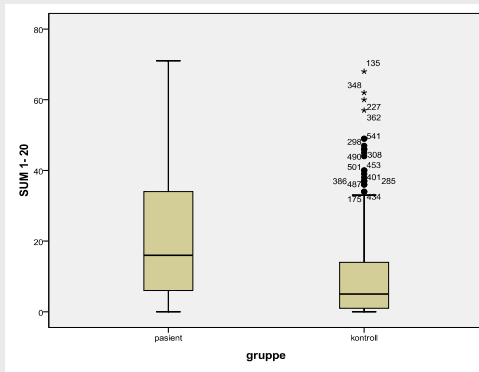


Figure 2. SumSNOT-20

	Mean	Confidence Interval	Median	Standard Deviation
Patient group	21,1	17,2- 25,1	16,1	17,0
Control group	9,4	8,3- 10,4	5,0	11,5

Tabell 1. Descriptive statistic Total SNOT-20

	Mean age	Women (%)	Men (%)
Patientgroup	49	42,2	57,7
Controlgroup	44	61,9	38,1

Tabell 2. Age and sex:

DISCUSSION

An association between GERD and CRS has previously been studied, but the results have been conflicting. A causal relationship is indicated by increased coexistence of both disorders compared to the general population, by biologically plausible pathophysiological mechanisms that can explain how the disease processes interact, and by observing beneficial effects on the suspected GERD-related disorder of anti-reflux therapy. This study speaks in favor for a causal link between GERD and CRS by demonstrating a reduced CRS-related quality of life in patients suffering from GERD.

CONCLUSIONS

Patients with GERD have a reduced nose- and sinus-related quality of life compared to a control group based on the fact that they have a significantly higher total SNOT-20 score than the controls. Accordingly, this study indicates that there is a causal relationship between GERD and CRS.

REFERENCES

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