Correlation Between Sinonasal Outcome Test-20 And Lund-Mackay Radiological Scoring System In Adult Patients With Chronic Rhinosinusitis

Thesis

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List of Abbreviations

Abb.	Meaning
AAO-HNS:	American Academy of Otolaryngology-Head and Neck Surgery
AC:	Anterior clinoid process
ANC:	Agger nasi cell
B:	Ethmoid bulla
BAFF:	B cell–activating factor of the TNF family
CBCT:	Cone-beam computerized tomography
CCS:	Clinical Consensus Statement
CG:	Crista galli
Col:	Cologne Questionnaire
CPG:	Clinical Practice Guideline
CRS:	Chronic rhinosinusitis
CRSsNP:	Chronic rhinosinusitis without nasal polyps
CRSwNP:	Chronic rhinosinusitis with nasal polyps
CSS:	Chronic Sinusitis Survey
CST:	Chronic Sinusitis Type Specific Questionnaire
CT:	Computed tomography
EA:	Ethmoid artery
EI:	Ethmoidal infundibulum
F:	Fairley's Symptom Questionnaire
F:	Frontal sinus
FoxP3:	Forkhead box p3
GTF:	The guidelines task force
HS:	Hiatus semilunaris
IgA:	Immunoglobulin A

List of Abbreviations

Abb.	Meaning
IgE:	Immunoglobulin E
IS:	The intersinus septum
IT:	Inferior turbinate
LMS:	Lund-Mackay score
MM:	Middle meatus
MMPs:	Matrix metalloproteinases
MO:	Maxillary ostium
MOS SF-36:	Medical Outcomes Study short form 36
MRI:	MAGNETIC Resonance Imaging
mRNA:	Messenger Ribonucleic acid
MSCT:	Multi-slice computerized tomography
MT:	Middle turbinate
NPs:	Nasal polyps
O:	Onodi cells
OMC:	Ostiomeatal Complex
ON:	Optic nerve
PCR:	Polymerase chain reaction
PE:	Posterior ethmoid
PND:	Post nasal discharge
RQLQ:	Rhinoconjunctivitis Quality of Life Questionnaire
RSDI:	Rhinosinusitis Disability Index
RSI:	Rhinosinusitis Symptom Inventory
RSOM:	Rhinosinusitis Outcome Measure
RSUI:	Rhinitis Symptom Utility Index
S aureus:	Staphylococcus aureus.

List of Abbreviations

Abb.	Meaning
S:	Sphenoid sinus
SB:	Suprabullar cells
SEs:	Staphylococcus aureus enterotoxin
SNAQ:	Sinonasal Assessment Questionnaire
SNOT16:	Sinonasal Outcome Test-16
SNOT-20:	The Sino-Nasal Outcome Test 20
SNOT22:	Sinonasal Outcome Test-22
SS:	Sinusitis Survey
ST:	Supraturbinal
Tbet:	T-box transcription factor
TGF:	Transforming growth factor
Th:	T helper cell
TIMPs:	Tissue inhibitors of metalloproteinase
TJs:	Epithelial tight junctions
TNF:	Tumor necrosis factor
Treg:	T regulatory cell
TS:	Transseptal
UP:	Uncinate process
V:	Vidian canal
VAS:	Visual analogue scale

ABSTRACT

Background: chronic rhinosinusitis (CRS) is a group of disorders characterized by inflammation of the mucosa of the nose and paranasal sinuses with a duration of at least 12 consecutive weeks. It is a common otorhinolaryngologic disease that is frequently encountered in everyday practice**.**

Aim of the Work: is to make a correlation between sinonasal outcome test-20 (SNOT-20) and Lund-Mackay radiological scoring system in patients with chronic rhinosinusitis.

Patients and Methods: 50 patients suffering from chronic rhinosinusitis and 50 normal persons were included in our study. The study and control groups were subjected to a questionnaire (SNOT 20) and the results were compared with the CT scan findings by Lund Mackay score to make a correlation between them.

Results: positive correlation was found between SNOT 20 score (symptoms) and Lund-Mackay score (CT scan), as SNOT 20 score was found to be directly proportional to Lund-Mackay score.

Conclusion: This study showed that there was a positive correlation between SNOT 20 score and Lund-Mackay score.

Key woeds: CRS,SNOT20,Lund- Mackay score

INTRODUCTION

Chronic rhinosinusitis (CRS) is defined as inflammation of the nose and the paranasal sinuses. It is characterized by two or more symptoms, one of which should be either nasal blockage/obstruction/congestion or nasal discharge, ±facial pain/pressure, ±reduction or loss of smell; and either endoscopic signs of polyps and/or mucopurulent discharge primarily from middle meatus and/or edema/mucosal obstruction primarily in middle meatus and/or CT changes showing mucosal changes within the ostiomeatal complex and/or sinuses. CRS symptom must have been present for more than 12 weeks ***(Fokkens et al., 2012)*.**

Because these symptoms are nonspecific, the diagnosis of CRS requires a physical examination or imaging demonstrates evidence of inflammation such as purulent mucous, nasal cavity edema, or polypoid mucosal changes. Nasal endoscopy offers superior visualization of underlying abnormalities. Septal deviation, nasal polyps, or a pneumatized middle turbinate (concha bullosa) may predispose a patient to CRS ***(Rosenfeld et al., 2007)*.**

In addition to patient symptoms and physical examination, the American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS) guidelines recommend