



Study on the correlation between nasal septal deviation and chronic rhinosinusitis in pilots

Yin Bai

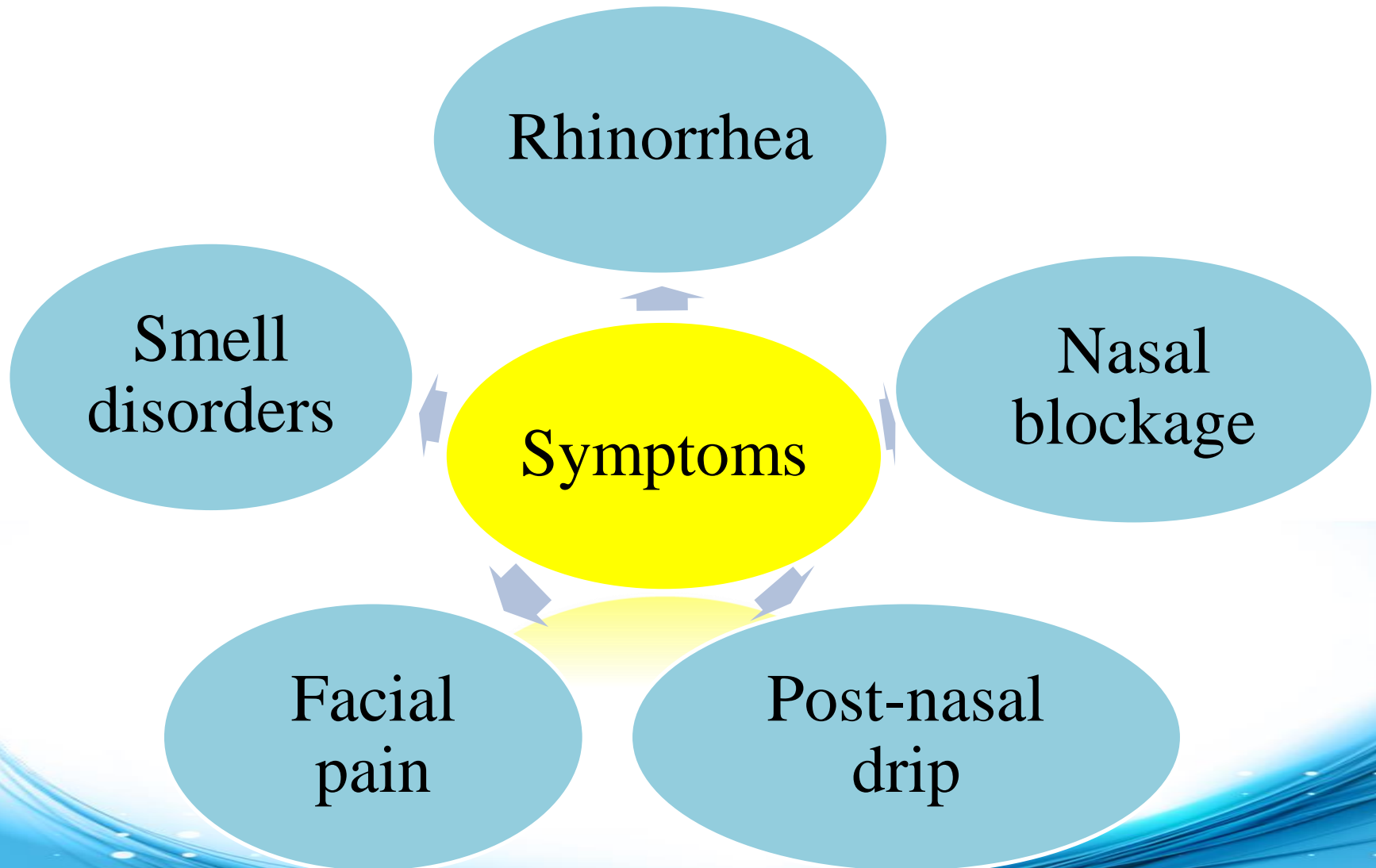
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Introduction

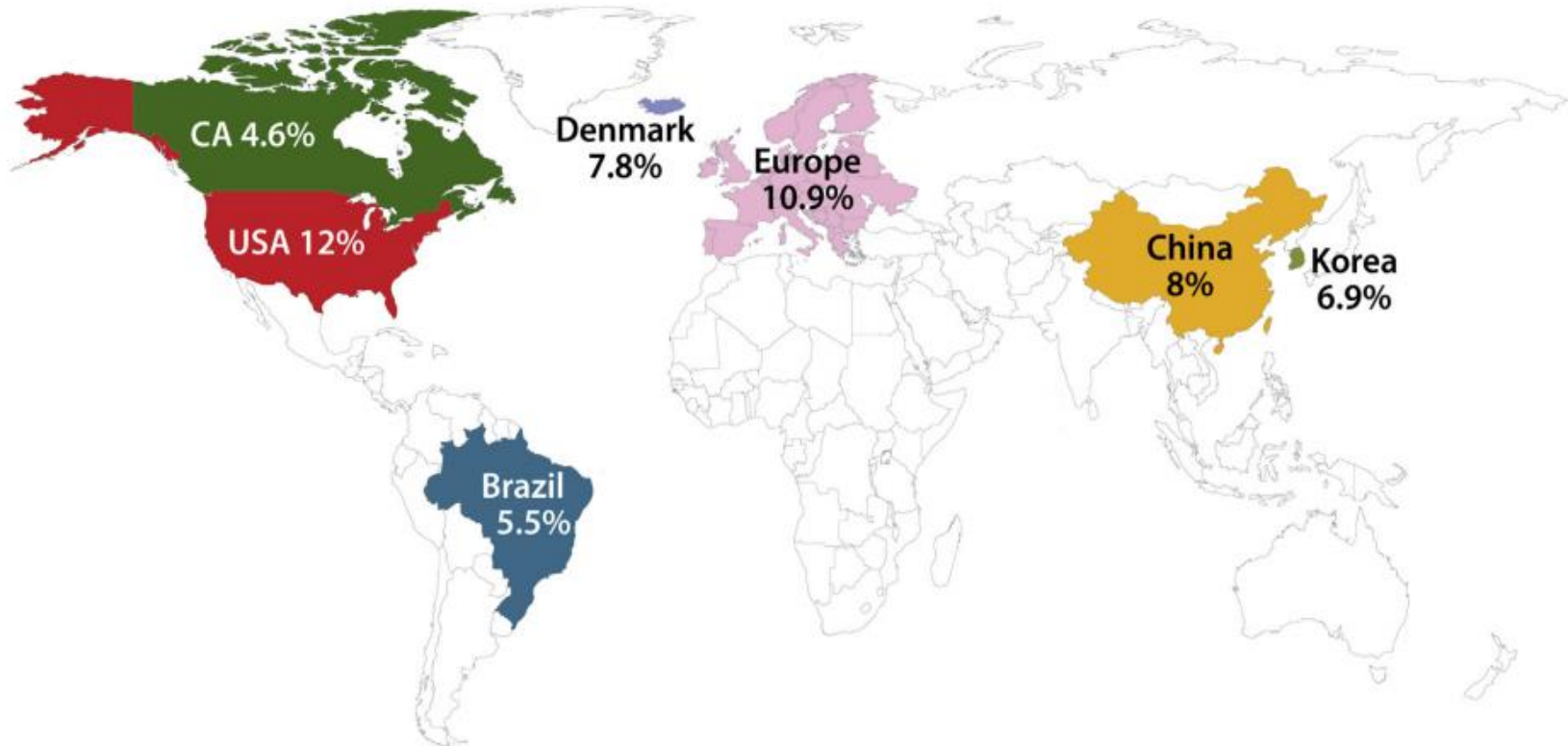
Chronic rhinosinusitis (CRS) is a prevalent disease defined as inflammation of the nose and the sinuses lasting more than 12 weeks.

The nasal septum is an important physiological structure of the nose. The nasal septal deviation (NSD) causes alteration in air flow, mucociliary clearance and effects structures.

Research Background



The prevalence of CRS



Clinical reviews in allergy and immunology

Series editors: Donald Y. M. Leung, MD, PhD, and Dennis K. Ledford, MD

Current and future treatment options for adult chronic rhinosinusitis: Focus on nasal polyposis

Claus Bachert, MD, PhD,^{a,b} Luo Zhang, MD,^{c,d} and Phillippe Gevaert, MD^a
China

Ghent, Belgium, Stockholm, Sweden, and Beijing,

Research Background

Original Investigation

Prevalence and Risk Factors of Chronic Rhinosinusitis, Allergic Rhinitis, and Nasal Septal Deviation Results of the Korean National Health and Nutrition Survey 2008-2012

Jae-Cheul Ahn, MD; Jeong-Whun Kim, MD, PhD; Chul Hee Lee, MD, PhD; Chae-Seo Rhee, MD, PhD

EXPERIMENTAL AND THERAPEUTIC MEDICINE 14: 1519-1525, 2017

Measurement of deformation rate in nasal septum deviation by three-dimensional computer tomography reconstruction and its application in nasal septoplasty endoscopic surgery

GUI YANG¹, HAILIANG ZHAO¹, PENG WANG¹, XIAODONG HAN¹,
XINYU ZAO¹, ZHIXIAN LIU¹, SHUQI QIU¹⁻³ and ZHIQIANG LIU^{2,3}

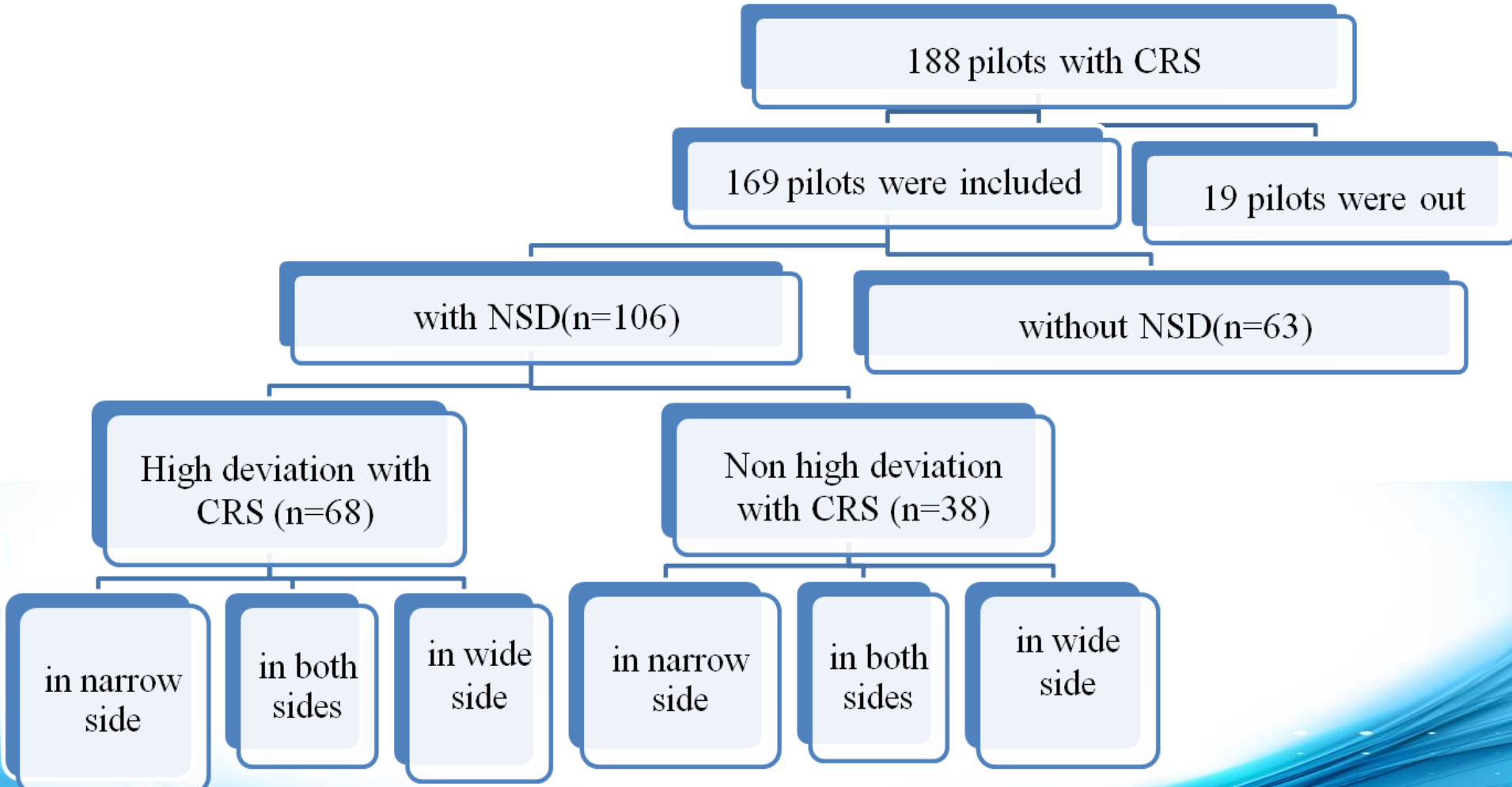
Indian J Otolaryngol Head Neck Surg
(Apr–Jun 2014) 66(2):187–190; DOI 10.1007/s12070-014-0713-7

ORIGINAL ARTICLE

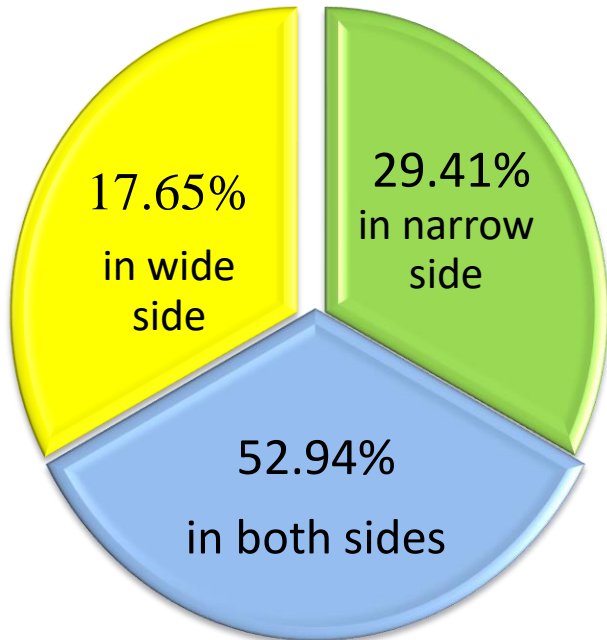
CT Scan Study of Influence of Septal Angle Deviation on Lateral Nasal Wall in Patients of Chronic Rhinosinusitis

R. K. Mundra · Yamini Gupta · Richi Sinha ·
Alaknanda Gupta

Methods

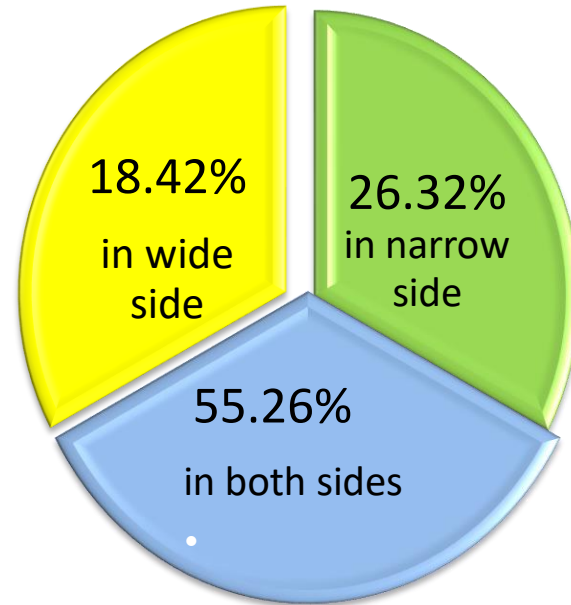


Results and Discussion



High deviation

$P > 0.05$



Non high deviation

Results and Discussion

The rhinosinusitis of each group involved by the wide and narrow side of nasal septum (n=106)

rhinosinusitis Deviation types	Anterior group	Posterior group	Whole group
Wide side	18	20	5
narrow side	27	17	19

$$\chi^2=6.6739, P=0.0355 < 0.05$$

Results and Discussion

Compared with the
general researchers

1

The higher prevalence

2

The scope of sinuses involved
were wider

3

The manifested heavily diseases

Results and Discussion

The change of pressure
in the nasal sinus

NSD

swollen nasal mucosa



Aerosinusitis

Conclusion and Prospect

- NSD is related to the formation of CRS.
- Different types of NSD have different influences on the formation of CRS.



Thank you for your attention