Prevalence of sinusitis among geriatric population in Bangalore metropolitan city

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Abstract
As per the Ministry of census of GOI, India has become home town of geriatric population and has been accounted for 65.0%. They are more prone to age related complications. Aging of the person will be visualizing the physiology and function of the nose changes reticulasly. The nose lengthens, and the nasal tip were begins to droop due to the weakening of the supporting cartilage. However, in turn to became restriction of nasal airflow, particularly at the nasal valve region (where the upper and lower lateral cartilages meet). Narrowing of this area resulted for vulnerable complaints of nasal obstruction, often referred to as geriatric rhinitis. The retrospective cross sectional study was conducted at Victoria and Bowring Hospitals attached to Bangalore Medical College & Research Institute during the year 2010-11. Total 200 old aged patients screened for the study purpose with irrespective of age and gender bias. The demographic profile and incumbent parameters were collected through pretested questionnaires. Collected data was analyzed by the SAS-16.50 version. As per the results the incidence was 20.0% as comprises male was 07(11.60%) and female was found to be 4(6.66%) respectively. Better therapeutic approach could be needed for geriatric population, who had suffers from chronic sinusitis problems. The structure and function of the aging nose may contribute to the manifestations and mechanisms of this condition.

Keywords: Geriatric population, Chronic sinusitis, Structural abnormalities.

Introduction
More than 20-30 percent of Indian residents will be 60 or older IN 2025 .Of all Indians 45 and older 9.86 percent report that they suffer from chronic sinusitis; for those > 70 years and older group population the rate declines to 6.5 percent .As per the Ministry of census of GOI, India has become home town of geriatric population and has been accounted for 65.0% .They are more prone to age related complications. Aging of the person will be visualizing the physiology and function of the nose changes reticulasly. The nose lengthens, and the nasal tip were begins to droop due to the weakening of the supporting cartilage. However, in turn to became restriction of nasal airflow, particularly at the nasal valve region (where the upper and lower lateral cartilages meet). Narrowing of this area resulted for vulnerable complaints of nasal obstruction, often referred to as geriatric rhinitis. Although the patients with geriatric rhinitis typically complain of constant sinus drainage, a chronic need to clear the throat or hawk” mucus, and a sense of nasal obstruction, most often when they lie down. Other features include nasal crusting especially in the winter and in patients taking diuretics, vague facial pressure (attributed to sinus trouble), and a decreased sense of smell and taste. In this context the present study aims to know the incidence of sinusitis among aging population.

Materials and Methods
The retrospective cross sectional study was conducted at Victoria and Bowring Hospitals attached to Bangalore Medical College & Research Institute during the year 2010-11. Total 200 old aged patients screened for the study purpose with irrespective of age and gender bias. The demographic profile and incumbent parameters were collected through pretested questionnaires. Collected data was analyzed by the SAS-16.50 version. All patients were meet inclusion and exclusion criteria.

Inclusion Criteria
Age of the person between 61-80 years, terminal illness of the patients were excluded from the study design. Details history of the patients was being collected from the patient’s card. Written consent obtained from the patients.

Results

![Gender distribution of the patients](image1)

**Fig. 1:** Gender distribution of the patients

![Age distribution of the patients](image2)

**Fig. 2:** Age distribution of the patients
As per the results the incidence was 20.0% as comprises male was 07(11.60%) and female was found to be 4(6.66%) respectively Fig. 3.

Discussion
The complaints of the sinusitis are constant need to clear the throat, a sense of nasal obstruction, Nasal crusting, Vague facial pain, Decreased sense of smell and taste. For the most part, sinusitis symptoms, diagnosis, and treatment are the same for the elderly as other adult age groups. However, there are special considerations for older Indians. Treatment for this age group needs to be more individualized to meet the patient’s slower metabolism and the increasing potential for side effects. The majority (80 to 85 percent) of the nation’s elderly have chronic diseases and take multiple drugs including over-the-counter medications, placing them at higher risk for drug interactions than other patients. Nasal and sinus surgery is occasionally advised for older patients. Patients with structural abnormalities, such as a deviated septum or nasal valve collapse causing severe nasal problems, should be referred to an otolaryngologist for evaluation and possible surgical management. As individuals age, several changes in nasal anatomy and physiology occur which may affect the development and expression of rhinitis. A loss of nasal tip support develops because of weakening of fibrous connective tissue at the upper and lower lateral cartilages. Collagen and elastin loss, maxillary alveolar hypoplasia, and decreased facial musculature lead to a drooped tip. Furthermore, weakening and fragmentation of septal cartilage and retraction of the nasal columella leads to changes in the nasal cavity. A combination of these structural changes may decrease nasal airflow leading to complaints of nasal obstruction commonly seen in geriatric rhinitis patients.

Conclusion
Better therapeutic approach could be needed for geriatric population, who had suffers from chronic sinusitis problems. The structure and function of the aging nose may contribute to the manifestations and mechanisms of this condition. This broad set of symptoms fall under a heterogeneous group of disorders, and thus the focus of therapy must first be classification of the patient within the proper subtype, and then engagement of appropriate therapy that is both safe and efficacious in older individuals.

Conflict of Interest: None.