

Chronic granulomatous conditions of nose

Volume 10 Issue 1 - 2018

Nawal B Dubey

Senior ENT Specialist, Alrayan Hospital, Bahrain

Correspondence: Nawal B Dubey, Senior ENT Specialist, Alrayan Hospital, Bahrain, Email dr_d_nawal2000@yahoo.co.in**Received:** January 29, 2018 | **Published:** February 15, 2018

Kingdom of Bahrain

a. Rhinoscleroma: Rhinoscleroma is a chronic granulomatous condition of the nose and other structures of the upper respiratory tract.

b. It is a result of infection by the bacterium *Klebsiella rhinoscleromatis*.

c. Rhinoscleroma is contracted by means of the direct inhalation of droplets or contaminated material.

d. The disease probably begins in areas of epithelial transition such as the vestibule of the nose, the subglottic area of the larynx, or the area between the nasopharynx and oropharynx.

e. Rhinoscleroma usually affects the nasal cavity, but lesions associated with rhinoscleroma may also affect the larynx; nasopharynx; oral cavity; paranasal sinuses; or soft tissues of the lips, nose, trachea, and bronchi.

f. Epidemiology

g. It is endemic to regions of Africa (Egypt, tropical areas), Southeast Asia, Mexico, Central and South America, and Central and Eastern Europe.

h. Rhinoscleroma tends to affect females somewhat more often than it does males.

i. Typically, rhinoscleroma appears in patients aged 10-30 years.

j. Disease may start as a single nodule or in groups in nasal cavity.

k. The lesions do not suppurate or ulcerate

l. They heal by dense cicatrization, almost cartilage like hardness

m. Possible history findings

n. Nasal obstruction (most common complaint)

o. Rhinorrhea

p. Epistaxis

q. Dysphagia

r. Nasal deformity

s. Anesthesia of the soft palate

t. Difficulty breathing that progresses to stridor

u. Dysphonia

v. Anosmia

Pathological development

a. Diffuse stage resembling atrophic rhinitis

b. Stage of localisation and organisation

c. Stage of cicatrization

DD

a. Atrophic rhinitis

b. Tertiary syphilis

c. Lupus

d. Leprosy

e. Cancer

Treatment

a. Streptomycin

b. Tetracyclines

c. Chlorphenicol

d. Steroids

e. Locally

f. Systemically

Wegner's granulomatosis

a. A condition characterized by granulomatous inflammation involving the respiratory tract and necrotizing vasculitis affecting small to medium sized vessels.

b. The pathological hallmark is the co-existence of vasculitis and granulomas and classically involves a triad of airway, lungs and renal disease.

Age and sex

a. Significant number of patients below 25 years of age.

b. Younger patients present with a generalized form.



Aetiology

- Aetiology remains unknown.
- Its inflammatory nature and resemblance to polyarteritis nodosa suggests that it represents some form of hypersensitivity reaction.
- It might be related to inhaled bacteria.

Clinical features

- Most patients start with minor ENT symptoms
- Variable degree of epistaxis
- Nasal Obstruction
- Bloody crusts
- Destruction of intranasal structures including septum may follow leading eventually to nasal collapse.
- Patients may complain of significant facial pain.

Pulmonary symptoms

- Cough
- Haemoptysis
- Pleuritic pain
- Cavitation
- Encapsulated lung abscess

Renal symptoms

- Between 30% to 90% patients develop renal symptoms.
- Microscopic haematuria
- Segmental or diffuse glomerulonephritis.

Ocular manifestations

- Conjunctivitis
- Dacrocystitis

- Corneal ulceration
- Optic neuritis and retinal artery occlusion.
- Blindness unilateral or bilateral

Otologic symptoms

- Acute otitis media
- Otitis media with effusion
- Deafness
- Otalgia

Both conductive and sensorineural hearing loss

Diagnosis

- cANCA test is positive in 95% of patients.
- A full blood count
- ESR
- Renal Profile
- Urine analysis

Biopsy from septum or turbinates

- Vasculitis
- Granulomas of epithelial cell type
- Multinucleated giant cells
- Mucosal thickening
- Bone destruction
- New bone formation

Treatment

- Steroids and a variety of cytotoxic drugs improve short term prognosis by 90%.
- Nasal symptoms managed by topical preparations.
- Augmentation rhinoplasty

Septal Perforation

Causes

A. Trauma

- Surgical
- Repeated cautery
- Digital trauma

B. Malignant disease

- Malignant tumours
- Malignant granuloma

C. Chronic infections

- Syphilis
- Tuberculosis
- Leprosy

D. Poisons

- a. Industrial
- b. Cocaine addicts

E. Idiopathic

- a. Most are iatrogenic in origin
- b. Repeated cautery of the septum
- c. Occupational: Commonest cause is penetration of the nasal mucosa by one of the hexavalent forms of chromium.
- d. Other causes include exposure to soda ash, arsenic and its compounds, organic compounds of mercury, cocaine and snuff.

**I. There are often four well marked stages of development:**

- a. Redness and congestion of mucosa
- b. Blenching and anaemia
- c. Necrosis and development of crusts
- d. Final extension of crusts in to cartilage and perforation

II. There are often four well marked stages of development:

- a. Redness and congestion of mucosa
- b. Blenching and anaemia
- c. Necrosis and development of crusts
- d. Final extension of crusts in to cartilage and perforation

III. There are often four well marked stages of development:

- a. Redness and congestion of mucosa
- b. Blenching and anaemia
- c. Necrosis and development of crusts
- d. Final extension of crusts in to cartilage and perforation

Symptoms

- a. Most septal perforations are asymptomatic.
- b. Development of large crusts may cause nasal obstruction
- c. Separation of crusts may lead to bleeding
- d. Whistling noise
- e. The larger the perforation more symptoms it would produce

Treatment

- a. Cure the causative disease process
- b. Perforations never heal spontaneously
- c. Less severe cases can be satisfactorily controlled by nasal douching
- d. Silastic Obturators can be used to close large perforations up to 4cm in diameter.
- e. If obturators fail to deliver consider surgery
- f. Perforations larger than 2cm are difficult to close

Acknowledgements

None.

Conflicts of interest

Author declares there are no conflicts of interest.

Funding

None.