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RESEARCH ARTICLE

RESISTANT RHINOSCLEROMA A CASE REPORT

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Abstract

Key words:-

Rhinoscleroma, Granulomatous
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and Sensitivity

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Introduction:-

1. Rhinoscleroma is a chronic progressive granulomatous condition affecting the upper airways^[a]
The infection occurs due to gram negative organism Klebsiella Rhinoscleromatis which was first described by Von Frisch in 1882^[b]
2. Though rhinoscleroma can involve any structure of upper respiratory tract, Klebsiella rhinoscleromatis has an affinity for nasal mucosa and thus present in nasal cavity in 95-100% of cases^[c]
3. It can also be found in nasopharynx 18-43%, larynx 15-40%, trachea 12% and bronchi 2-7%^[d]

Case Report

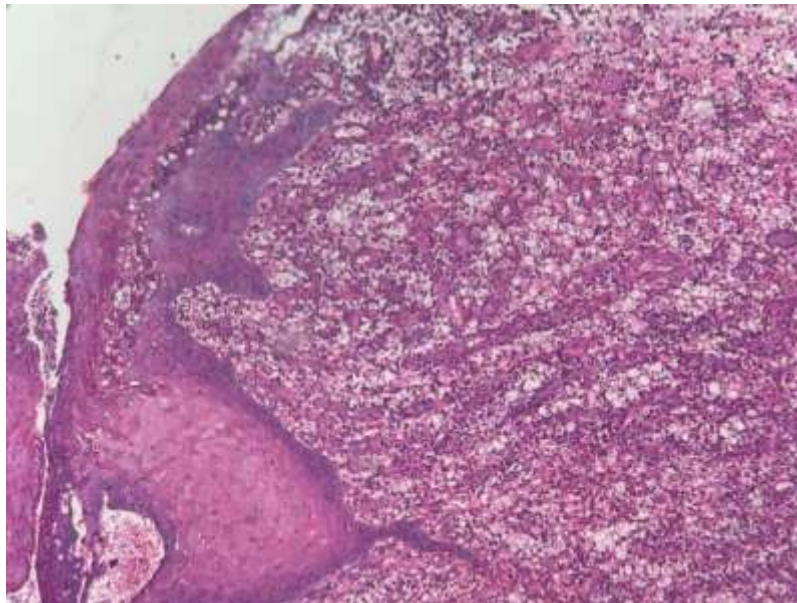
1. 18 year old male patient presented to ENT OPD with complaints of bilateral nasal obstruction since 3 years.
2. Anterior rhinoscopy examination – showed crusting with extensive granulation and thick nasal discharge in bilateral nasal cavity.
3. Diagnostic Nasal Endoscopy - showed granular surface in bilateral nasal cavity, granulation of bilateral inferior turbinates, narrowing of left choana.
4. Oral cavity examination- showed retracted uvula.
5. Indirect laryngoscopy - showed normal findings.

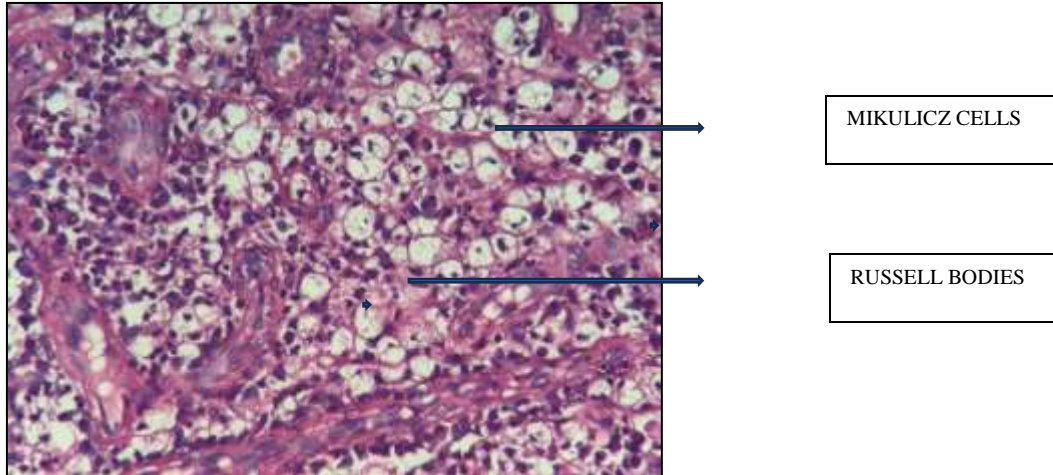
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Clinical Pictures Showing**Fig1:- Granulation of Right Nasal Cavity****Fig 2:- Retracted Uvula.**

1. Culture sensitivity of nasal discharge showed staphylococcus aureus
2. Biopsy of granular tissue was reported as Rhinoscleroma .
3. Patient was then started on tablet ciprofloxacin 500mg twice a day for 3 months ^[e], to which no response was noted .
4. So diagnostic nasal endoscopy with Excision of granulation tissue done, which was sent for biopsy and tissue for culture sensitivity.
5. Bilateral intranasal stenting done .
6. Tissue for culture sensitivity was reported as sensitivity to streptomycin and doxycycline .

Histopathological Pictures



Post operatively patient was advised injection streptomycin 0.75mg intramuscular once a day for 1 month, followed by capsule doxycycline 100mg twice a day for 3 months and 5% acriflavine cream for topical application, intranasal stent (Et tude no 6.5) for 3 months at night while sleeping.

Patient once symptomatically better, posted for revision biopsy in march 2023, which showed free from disease, now the patient is doing well and under regular follow up.

Discussion:-

Rhinoscleroma is a chronic specific inflammatory disease usually affecting the nose and ultimately progressing to a granulomatous condition resulting in mechanical obstruction.

Clinical presentation :

3 Stages

- 1 .Atrophic stage
- 2 .Granulomatous stage
- 3 .Cicatrical stage

Diagnosis

1. Biopsy confirms the diagnosis
2. In case of resistance to most common form of treatment, tissue for culture and sensitivity can be used as a standard tool for diagnosis of sensitivity.
3. Differential diagnosis of Rhinoscleroma are Leprosy, tuberculosis, syphilis, lupus vulgaris, Rhinosporidiosis.

Treatment

1. Nasal and pharyngeal obstruction is best managed surgically along with antibiotic therapy.
2. The order of sensitivity is Streptomycin, Oxytetracycline and Chloramphenicol
3. 5% Acriflavine cream for topical application.

Conclusion:-

1. Rhinoscleroma is difficult to diagnose, may be confused with Leprosy, tuberculosis, syphilis, lupus vulgaris, Rhinosporidiosis.
2. A high degree of suspicion is required by clinician to diagnose the disease and prompt treatment should be given to avoid the progression of disease and complication.
3. Adequate biopsy material sent for histopathological may prove to be useful in diagnosis along with proper clinical history.
4. In case of resistance to ciprofloxacin which is considered as 1st line of treatment^(c), tissue for culture sensitivity can be used as diagnostic tool to know the sensitivity.
5. Patients requires acute as well as long term follow up for proper management.

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