

GRANULOMATOUS DISEASE OF NOSE

- **Bacterial**

- Rhinoscleroma
- Syphilis
- Tuberculosis and Lupus vulgaris
- Leprosy

- **Fungal**

- Rhinosporodiosis
- Aspergillosis
- Mucormycosis
- Candidiasis

- **Others**

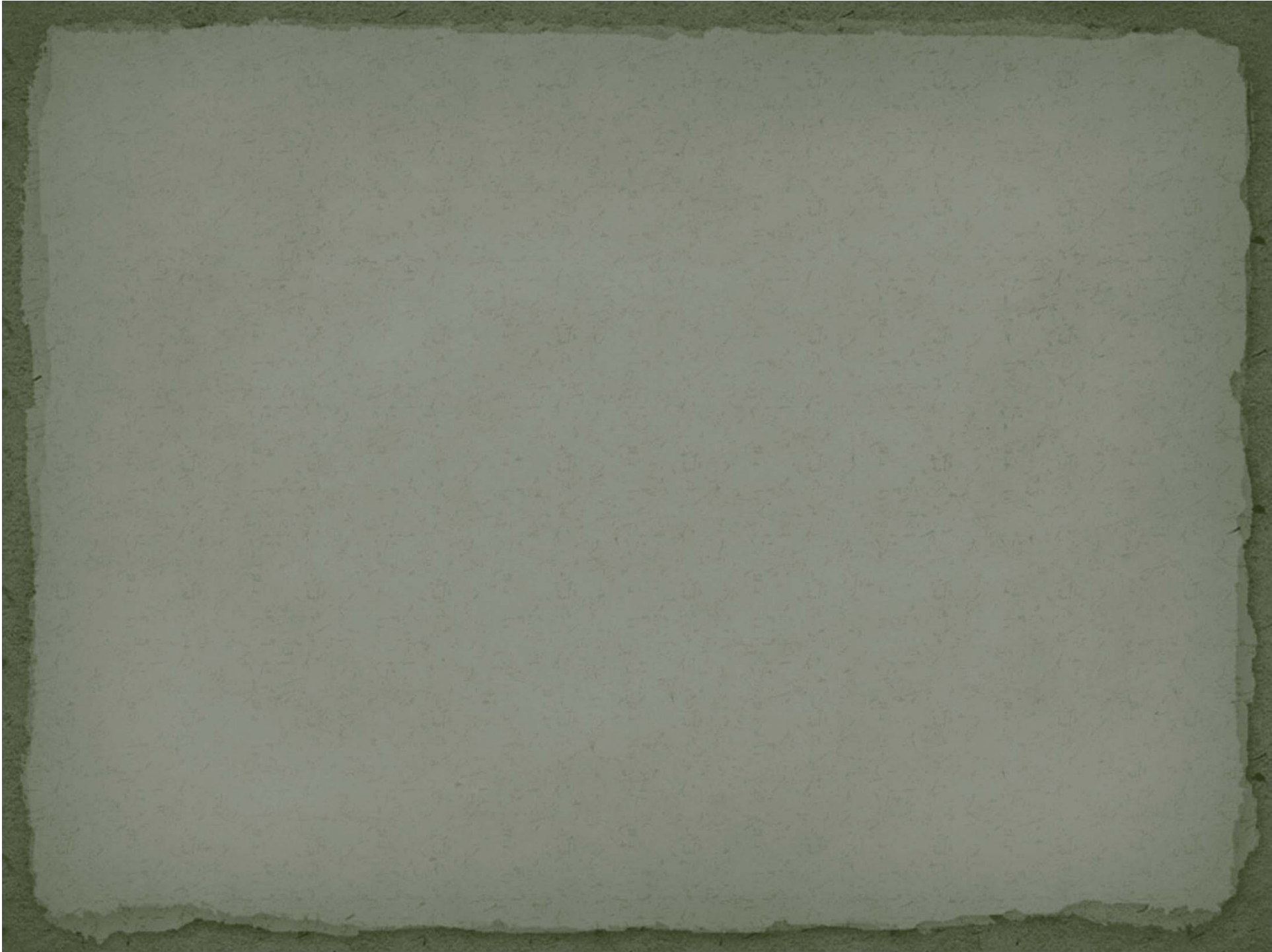
- Wegener's granulomatosis
- Midline granuloma
- Sarcoidosis

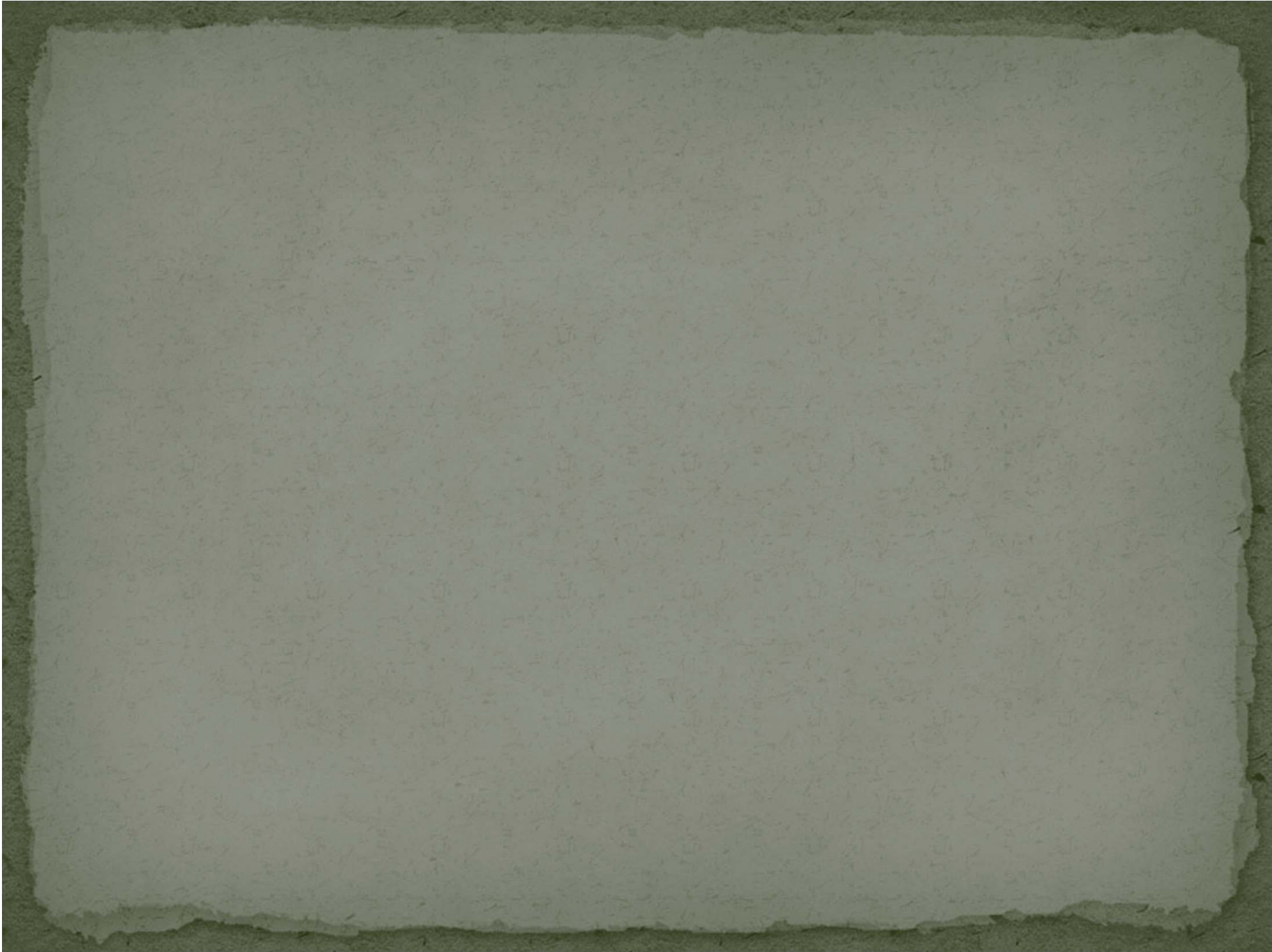
Rhinoscleroma

- Caused by – *Klebsiella rhinoscleromatis* (Frisch bacillus), a gram negative bacillus
- any age and sex
- Primary site is nose

• Clinical features

1. catarrhal stage
2. Atrophic stage
3. Granulomatous stage(woody nose)
4. Cicatricial stage





Herba nose

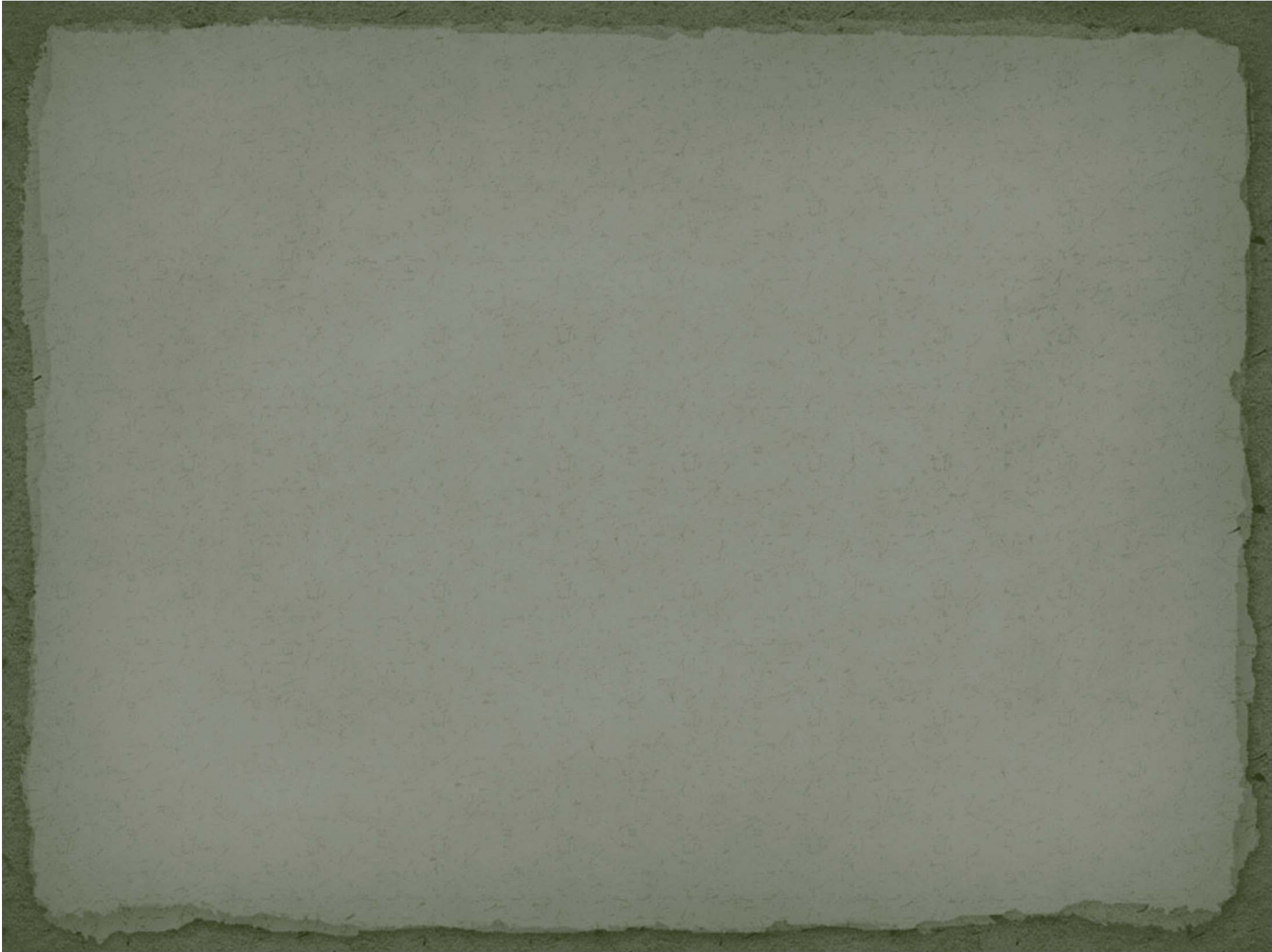


• Diagnosis

Biopsy

infiltration of submucosa with

- Plasma cell
- Lymphocytes
- Eosinophils
- *Mikulicz cell*
- *Russell body*



• Treatment

- Streptomycin (1 g/day for 4 weeks) plus tetracycline (2 g/day) is the recommended treatment regimen for rhinoscleroma. A second course of this therapy is repeated after 1 month. Even during the acute or granulomatous stage, this will give a 60% to 70% cure rate.
- Corticosteroids
- Surgical treatment

Syphilis

- **Congenital**

- Early form
- Late form

- **Acquired**

- Primary (chancre)
- Secondary
- Tertiary (gumma)

- **Early congenital syphilis**
 - Purulent nasal discharge
 - Fissuring and excoriation of nasal vestibule
- **Late congenital syphilis**
 - Gummatous lesion destroy the nasal structure
 - Corneal opacity
 - Deafness
 - Hutchinson's teeth

- **Primary acquired syphilis**
 - Primary chancre
- **Secondary acquired syphilis**
 - Lymphadenitis, mucosal patch ,fissures and crusts
- **Tertiary syphilis**
 - Gummatous lesion

Diagnosis

- VDRL

- Biopsy

- TPHA

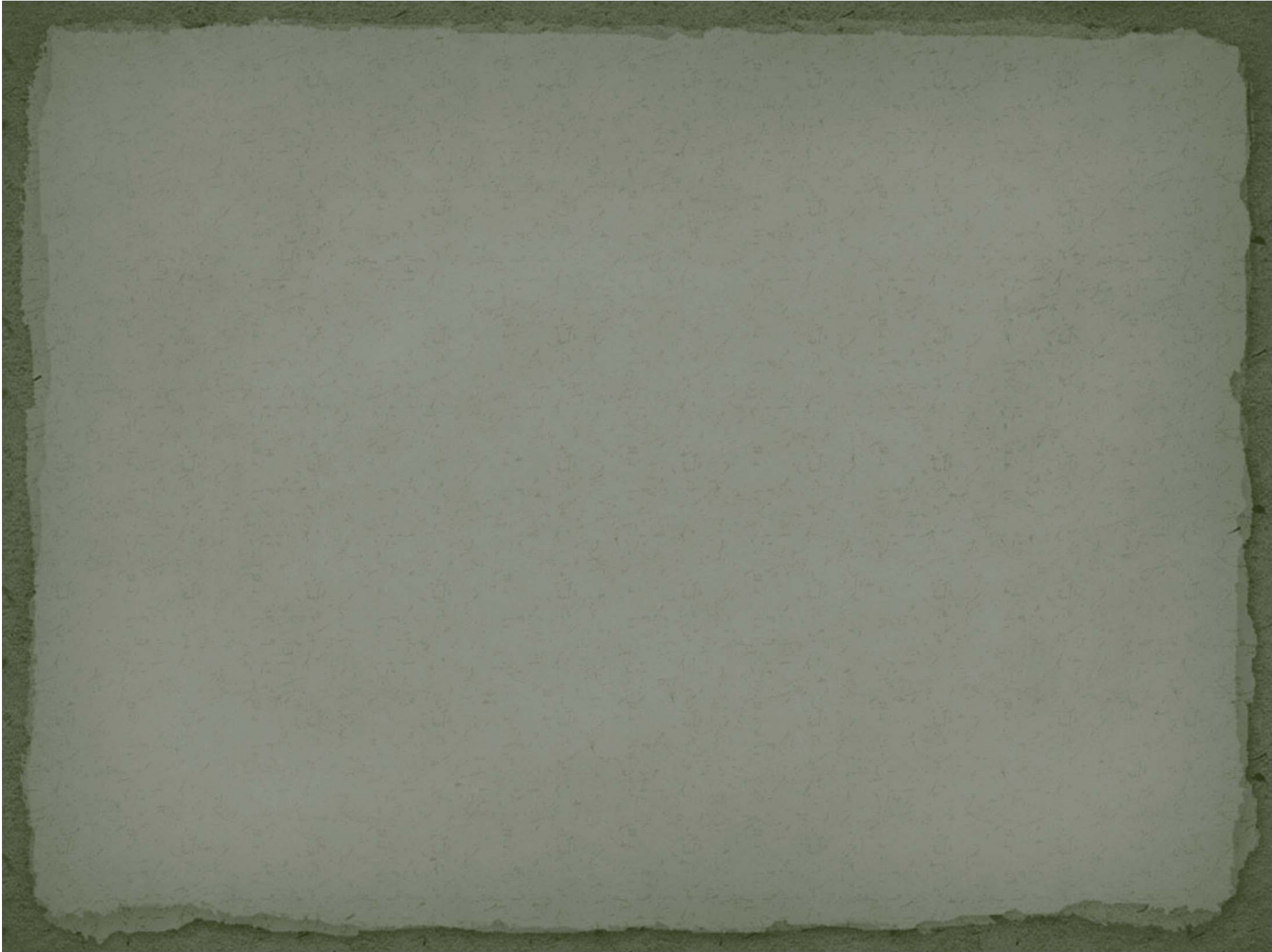
- FTA-ABS

- Treatment

**Benzathine penicillin 2.4 million
units i.m weekly x 3week**

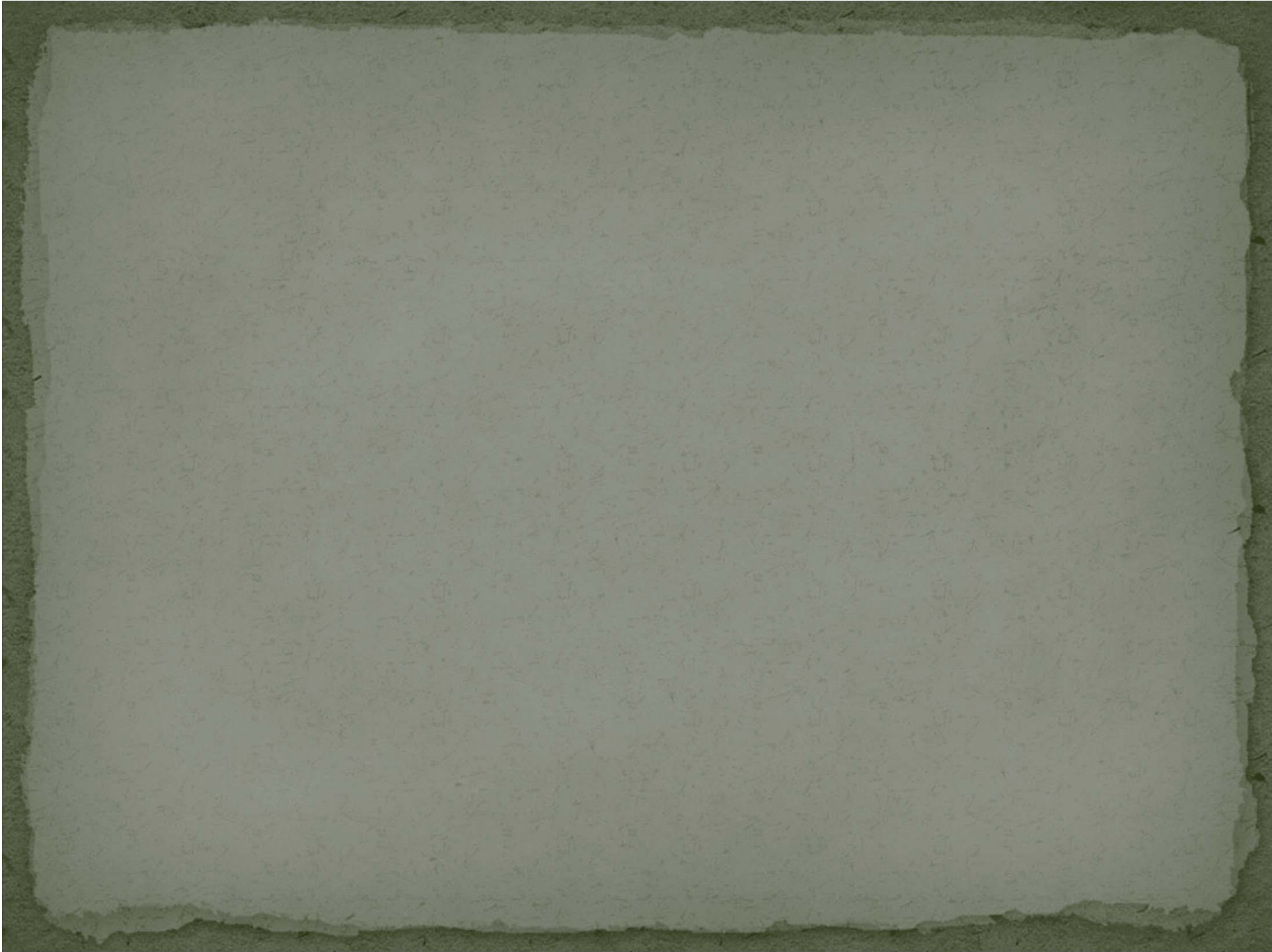
• Complications

1. Vestibular stenosis
2. Perforation of **nasal septum**
3. Secondary atrophic rhinitis
4. Saddle nose deformity



Syphilis gumma



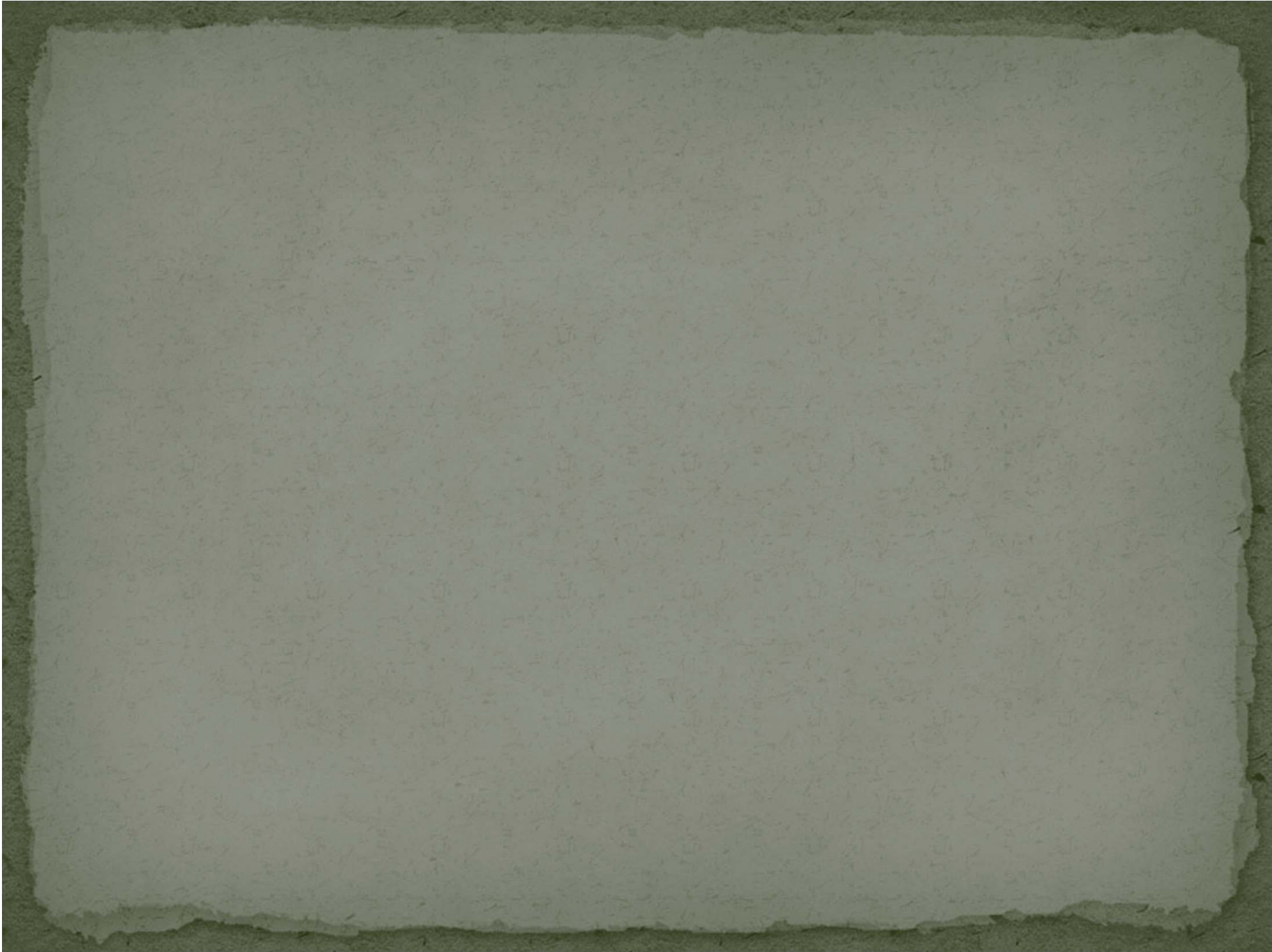


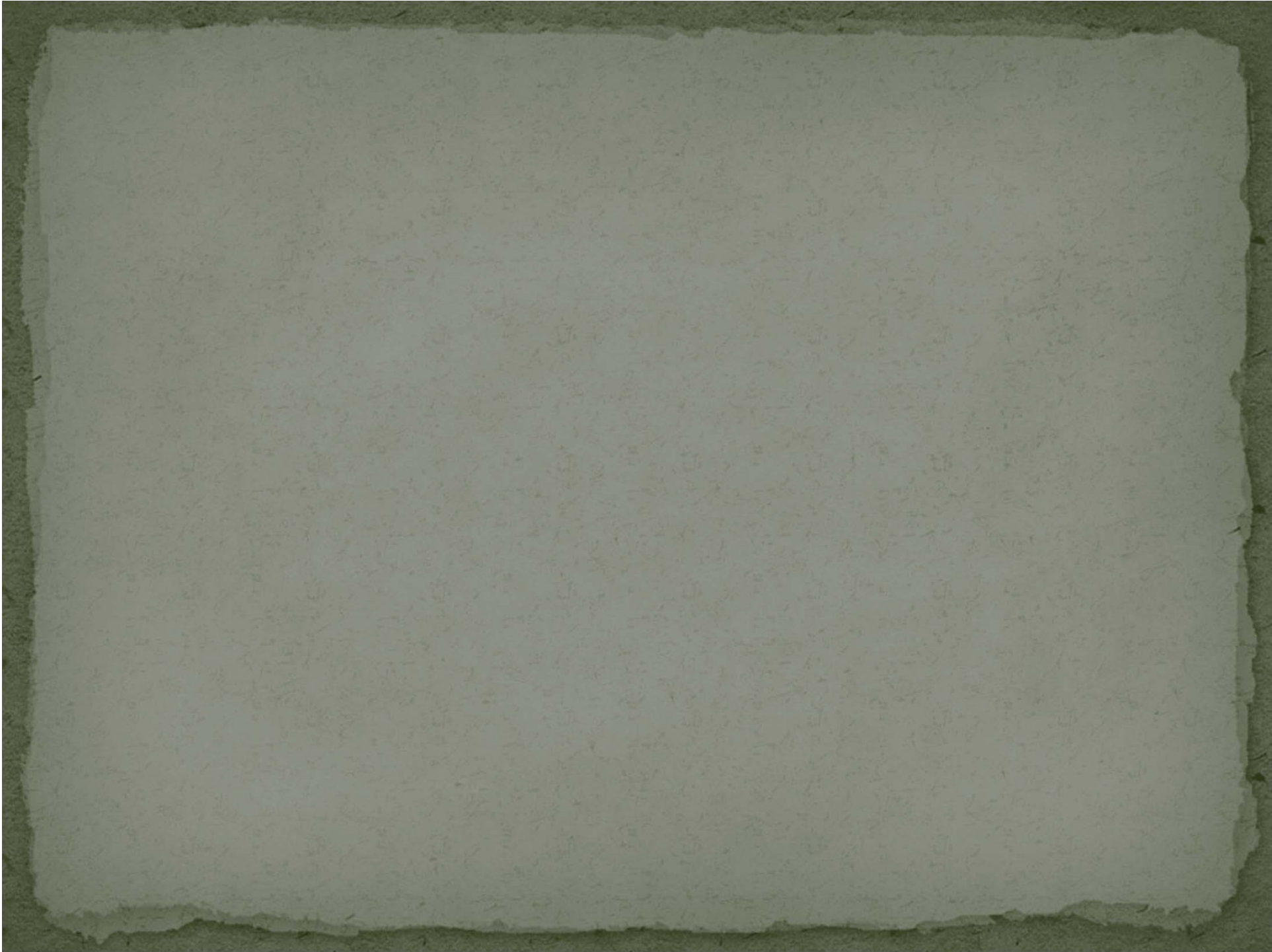
Tuberculosis

- Primary nasal infection is rare
- Secondary to pulmonary T.B.
- Nodular infiltration of anterior part
- Ulceration and perforation of the cartilaginous part of the septum
- Diagnosis by Biopsy
- Anti tubercular drug is the t/t

Lupus vulgaris

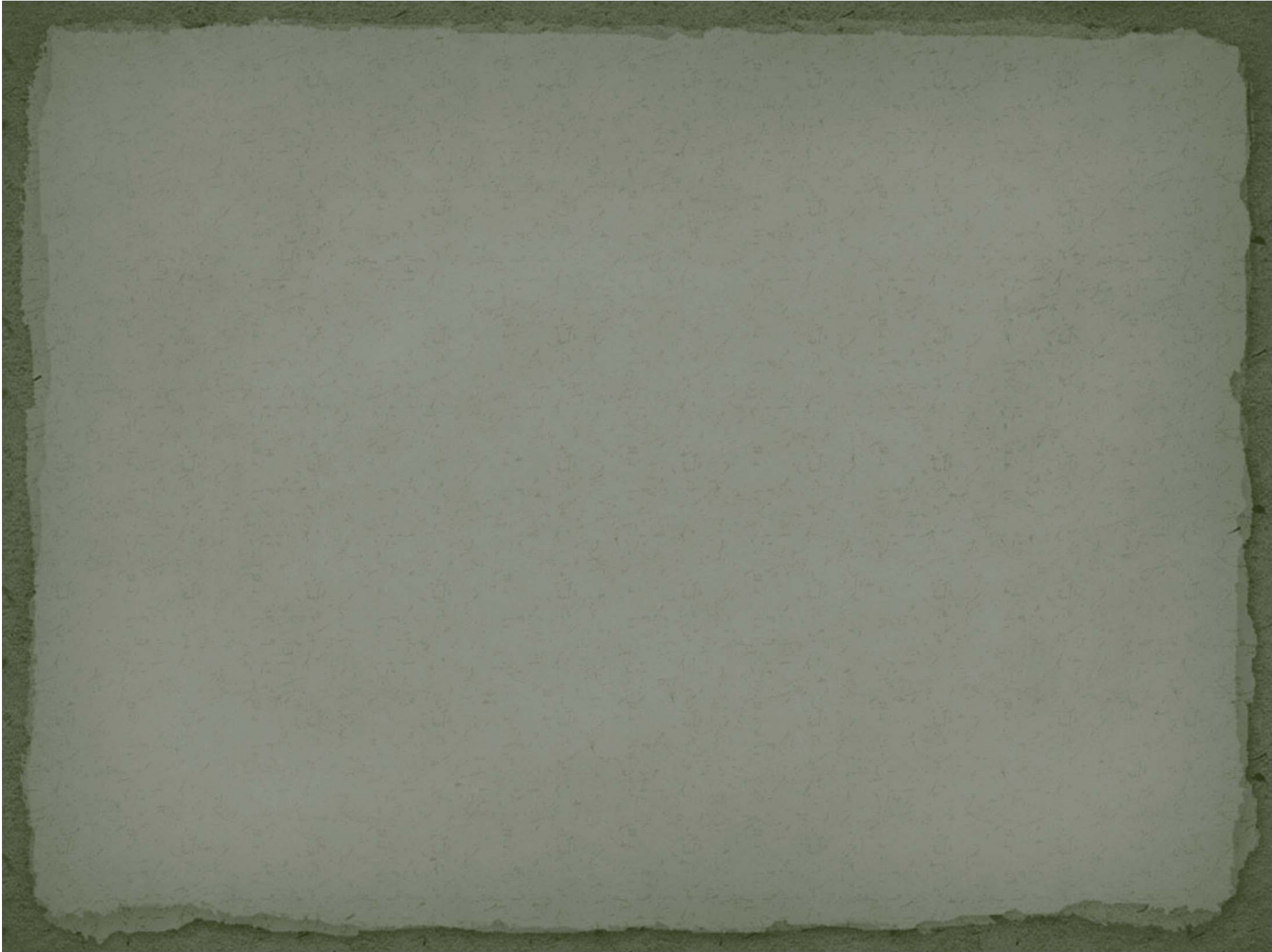
- Low grade tubercular infection
- Commonly involve the nasal vestibule and skin of the face
- Characteristic feature is “apple-jelly nodules” brown, gelatinous nodules
- Perforation of the cartilaginous septum
- Biopsy is diagnostic
- Anti-Tubercular t/t.





Leprosy

- Caused by M.leprae
- Mostly by Lepromatous leprosy
- Starts from the nasal vestibule and involve the septum and inf turbinate
- Nodular lesion → Ulcers → Perforation Atrophic rhinitis → Retraction of collumela
- Diagnosis by Biopsy
- Anti-leprotic therapy



Lionine faces

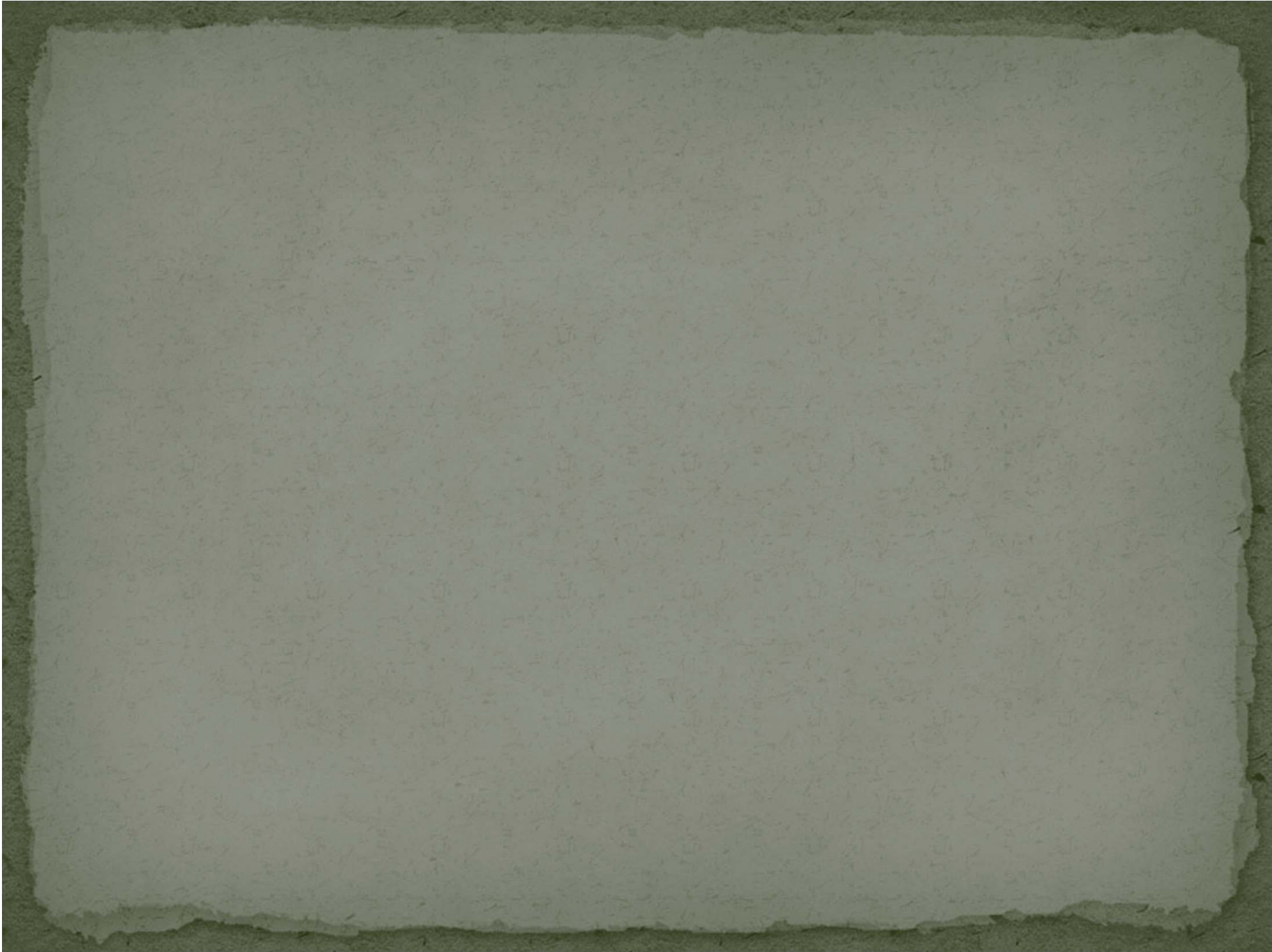


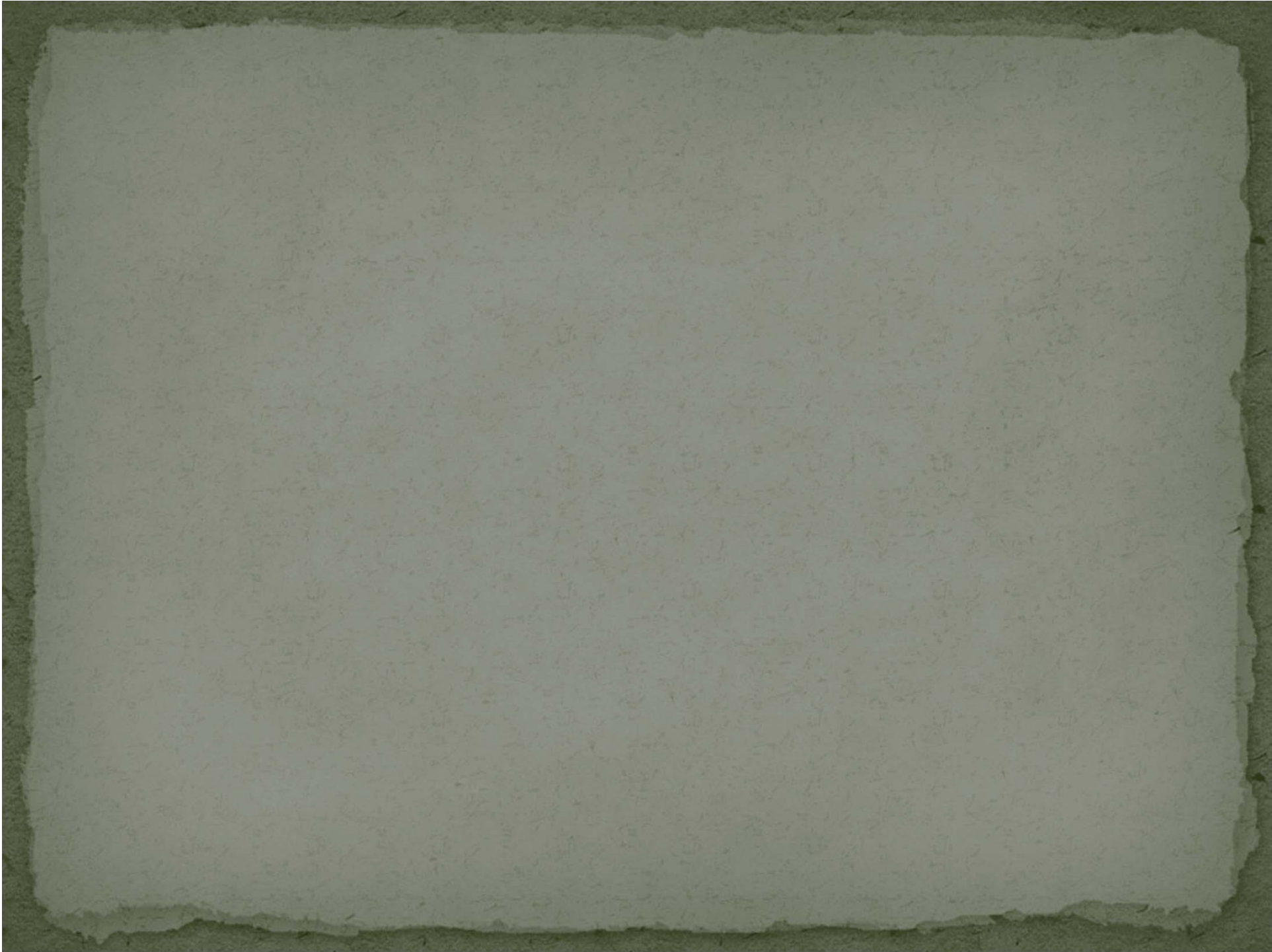
- Dapsone (100 mg/d) *plus* clofazimine (50 mg/d), unsupervised; *and* rifampin (600 mg) *plus* clofazimine (300 mg) monthly (supervised) for 1–2 years

Rhinosporidiosis

- Caused by – R. seeberi (fungus)
- Seen in India ,Pakistan, Sri Lanka
- Source of infection – Infected pond
- Mostly affects –Nose & Nasopharynx
- Symptoms – Nasal obst & discharge,epistaxis
- Signs – Leaf like polypoid mass, pink to purple color
- Diagnosis – Biopsy
- T/t – Exn & Cautsn of base (Chronic- Dapsone)

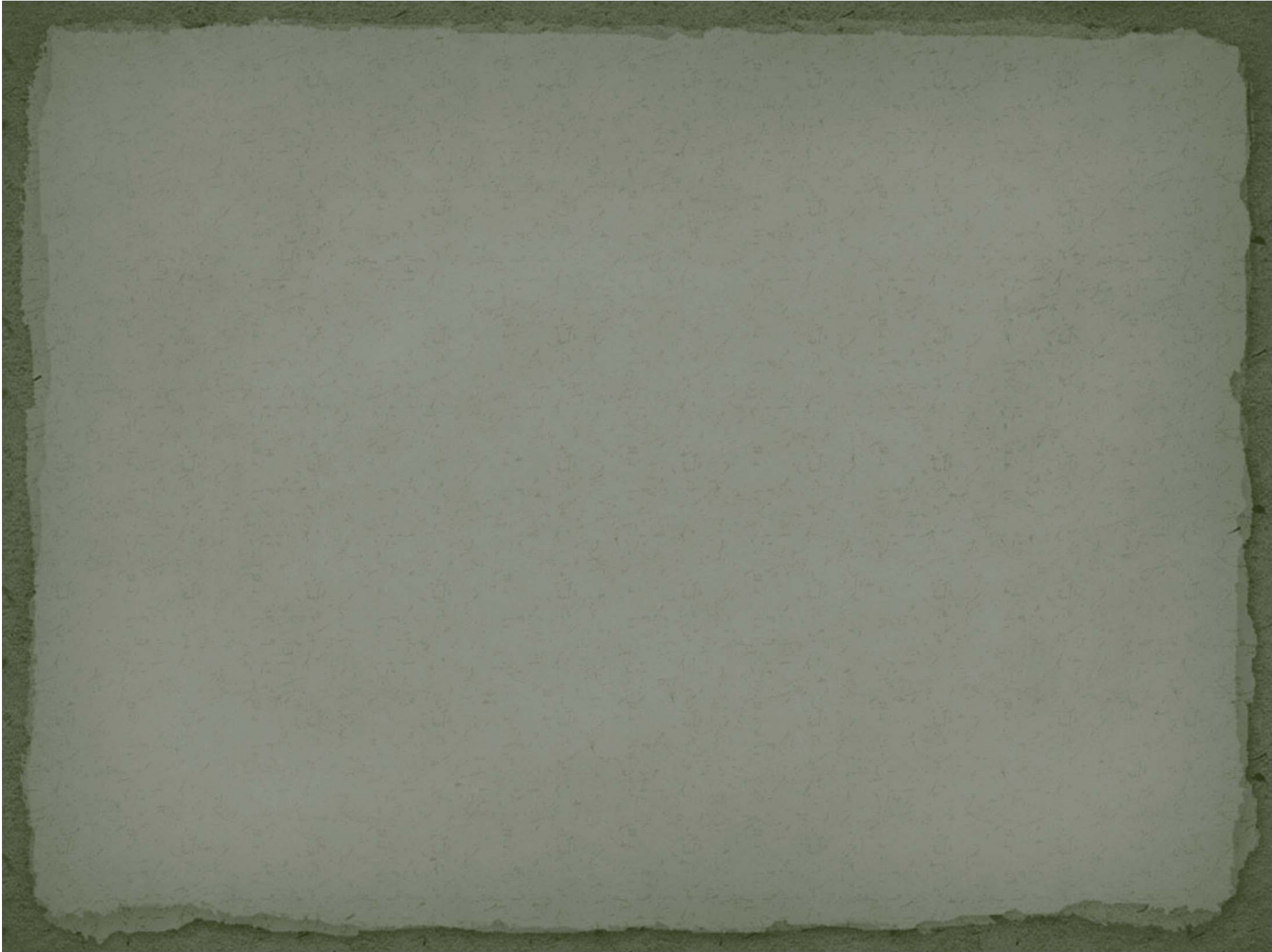






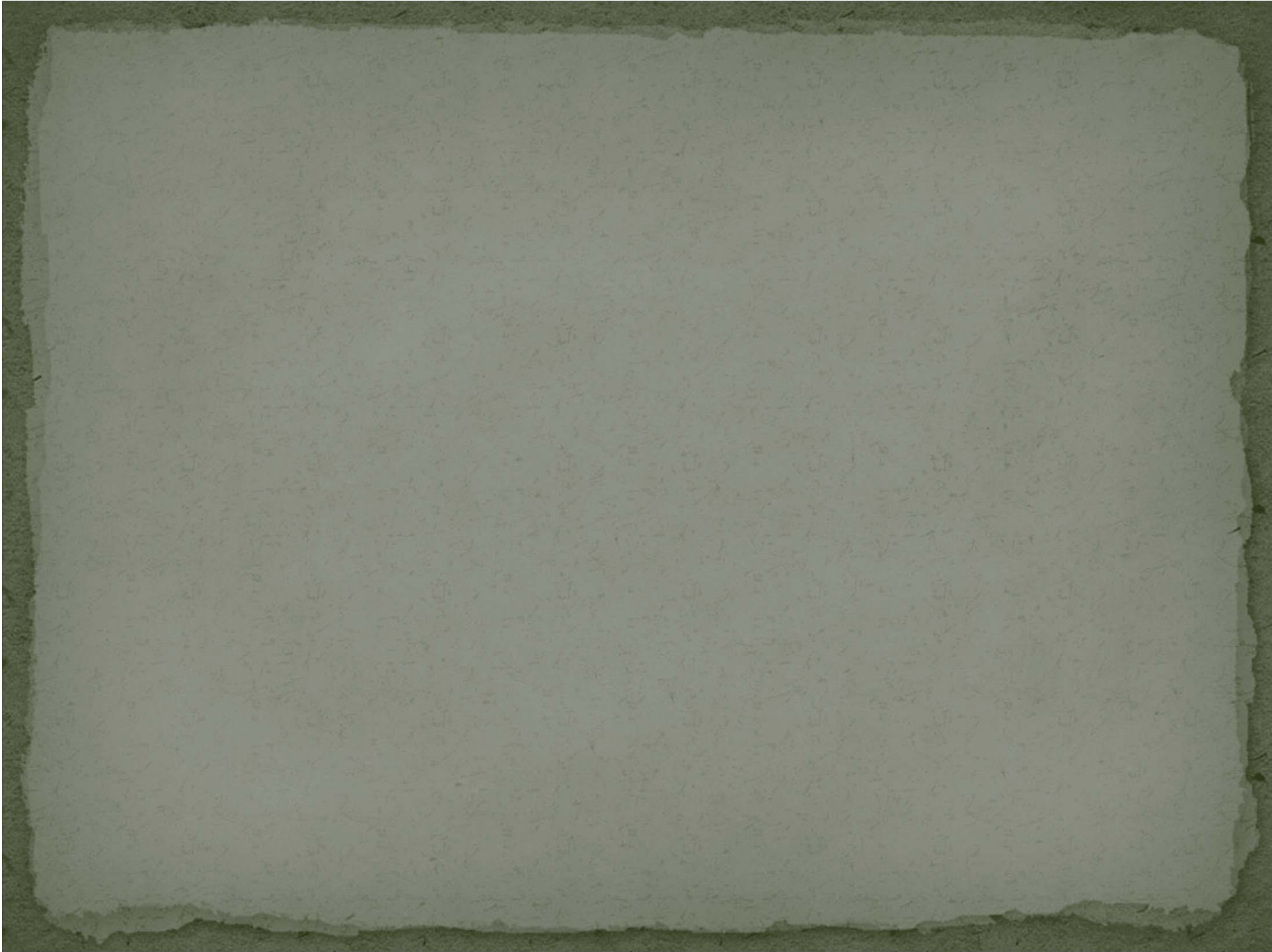
Aspergillosis

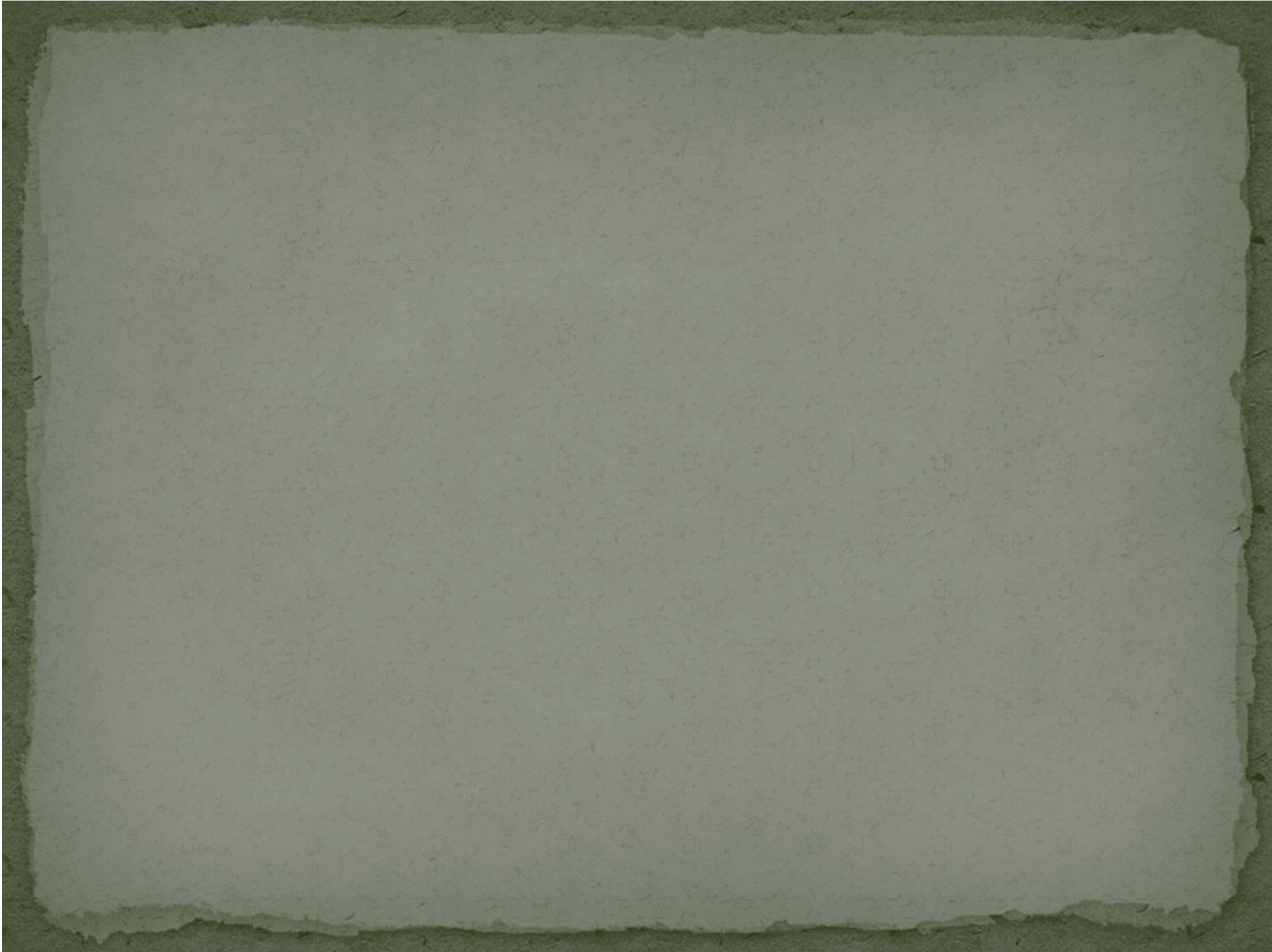
- Caused by *A.niger*, *fumigatous*, *flavus*
- Immunocompromised pt
- C/f – Acute or Sub acute rhinitis or sinusitis with cheesy white or black materials in the sinuses
- T/t – Surgical debridement with anti-fungal drugs
(Irrigation with gentian violet soln 1% is helpful)

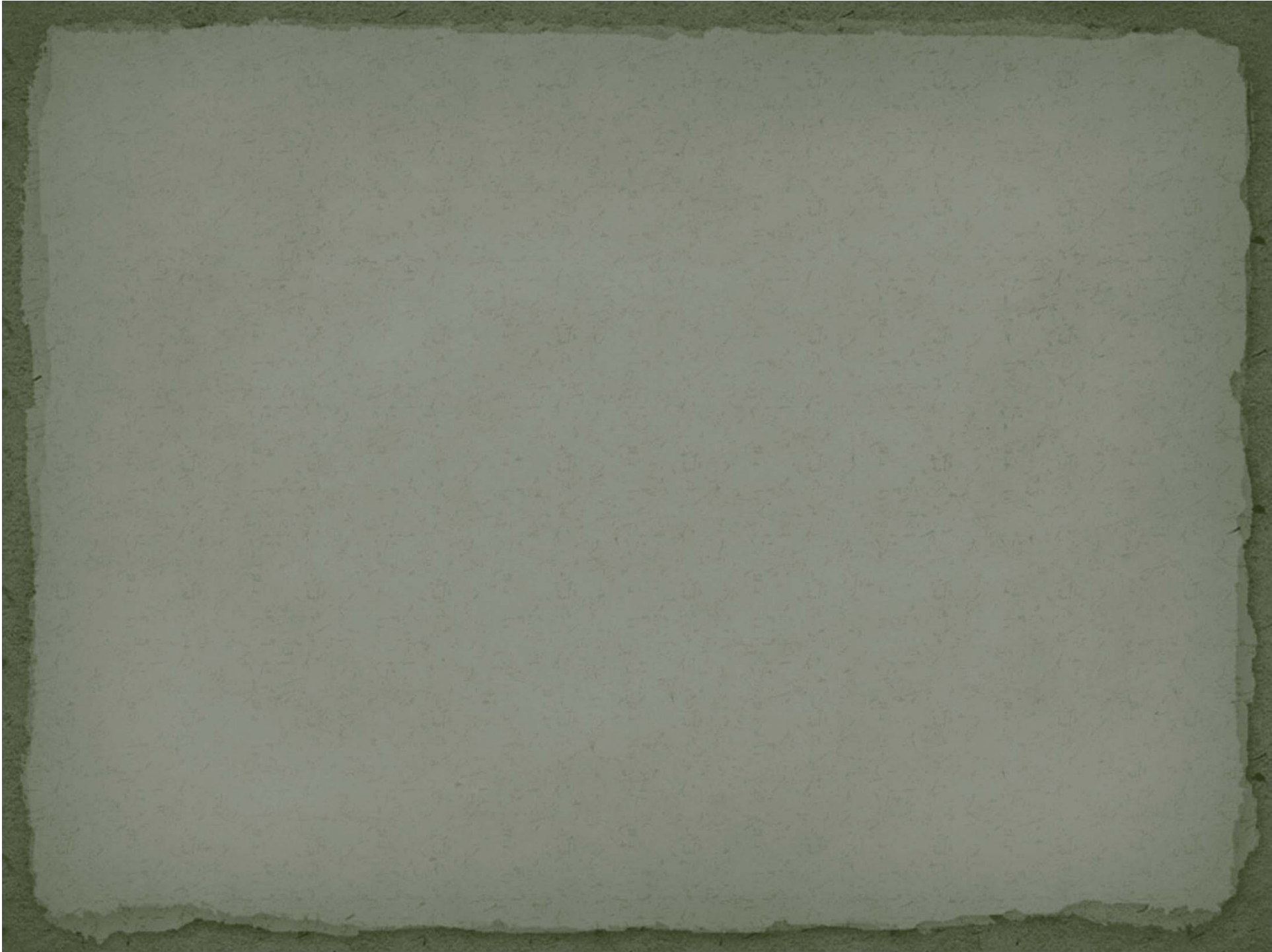


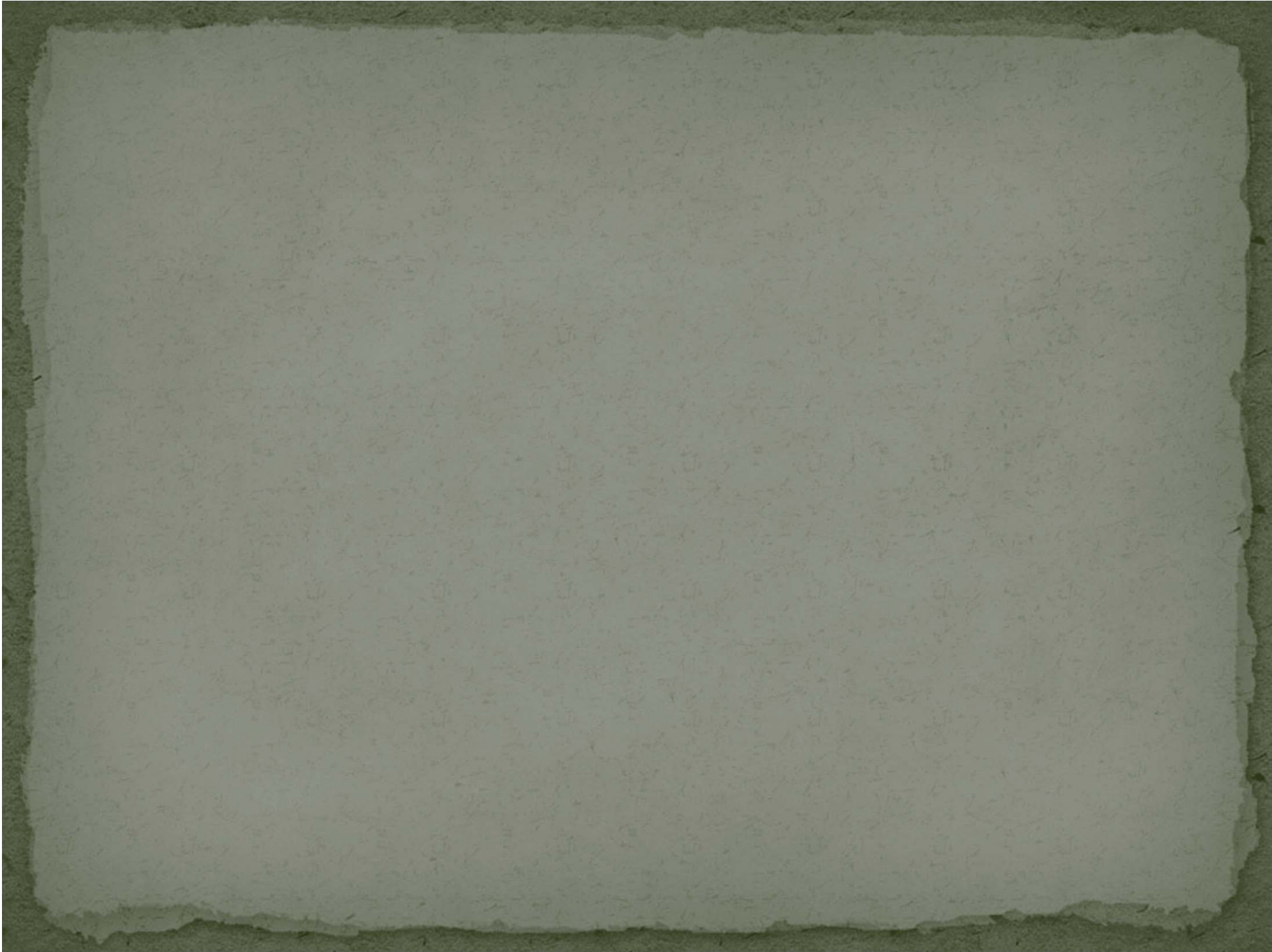
Mucormycosis

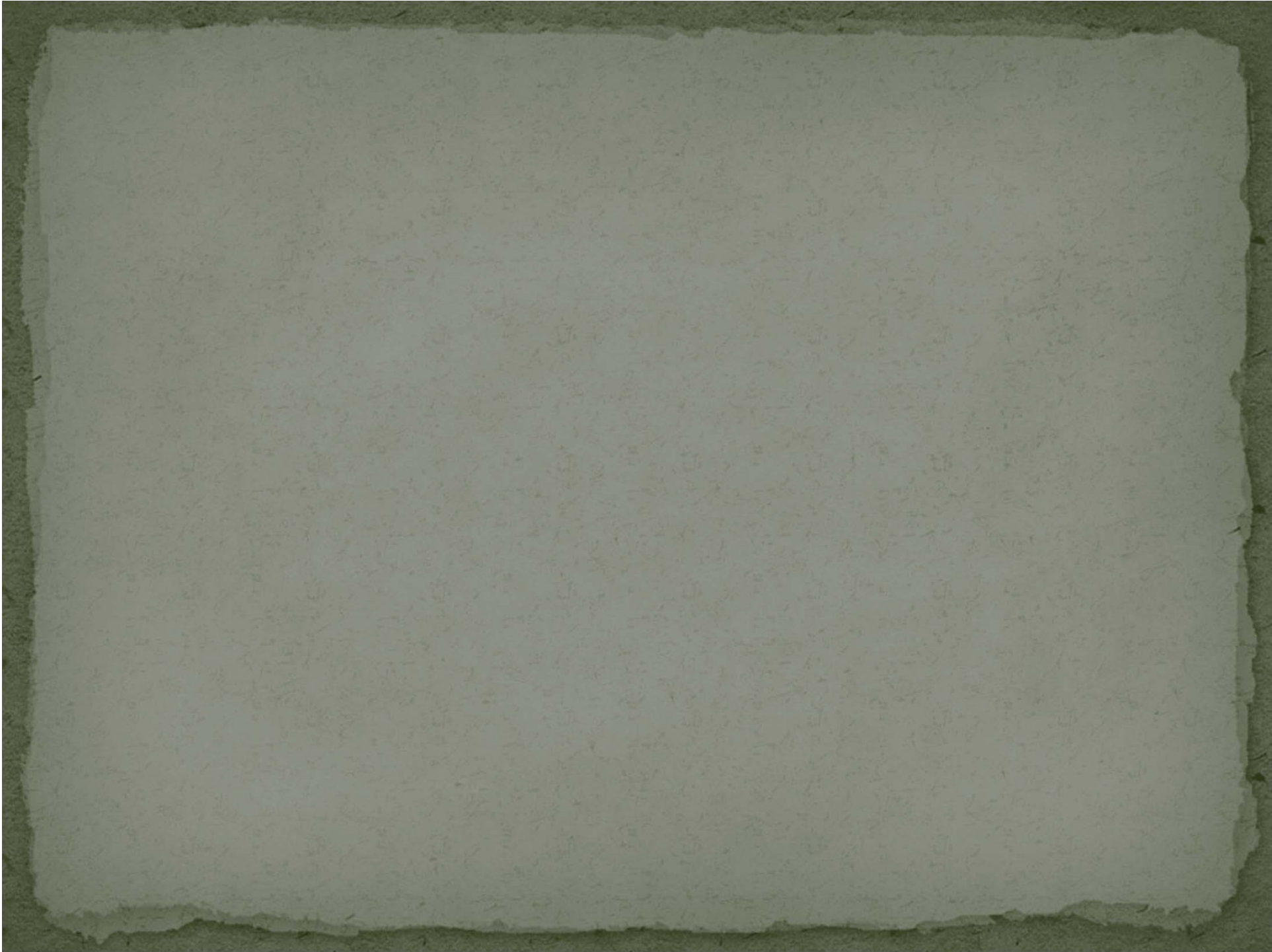
- Found in uncontrolled diabetics and pt with immunosuppressive therapy
- Rapidly fatal condition
- Affinity of the fungus to artery ,causes thrombosis
- Black necrotic mass eroding the septum and hard palate
- T/t – Surgical debridement, amphotericin B ,control of underlying cause.





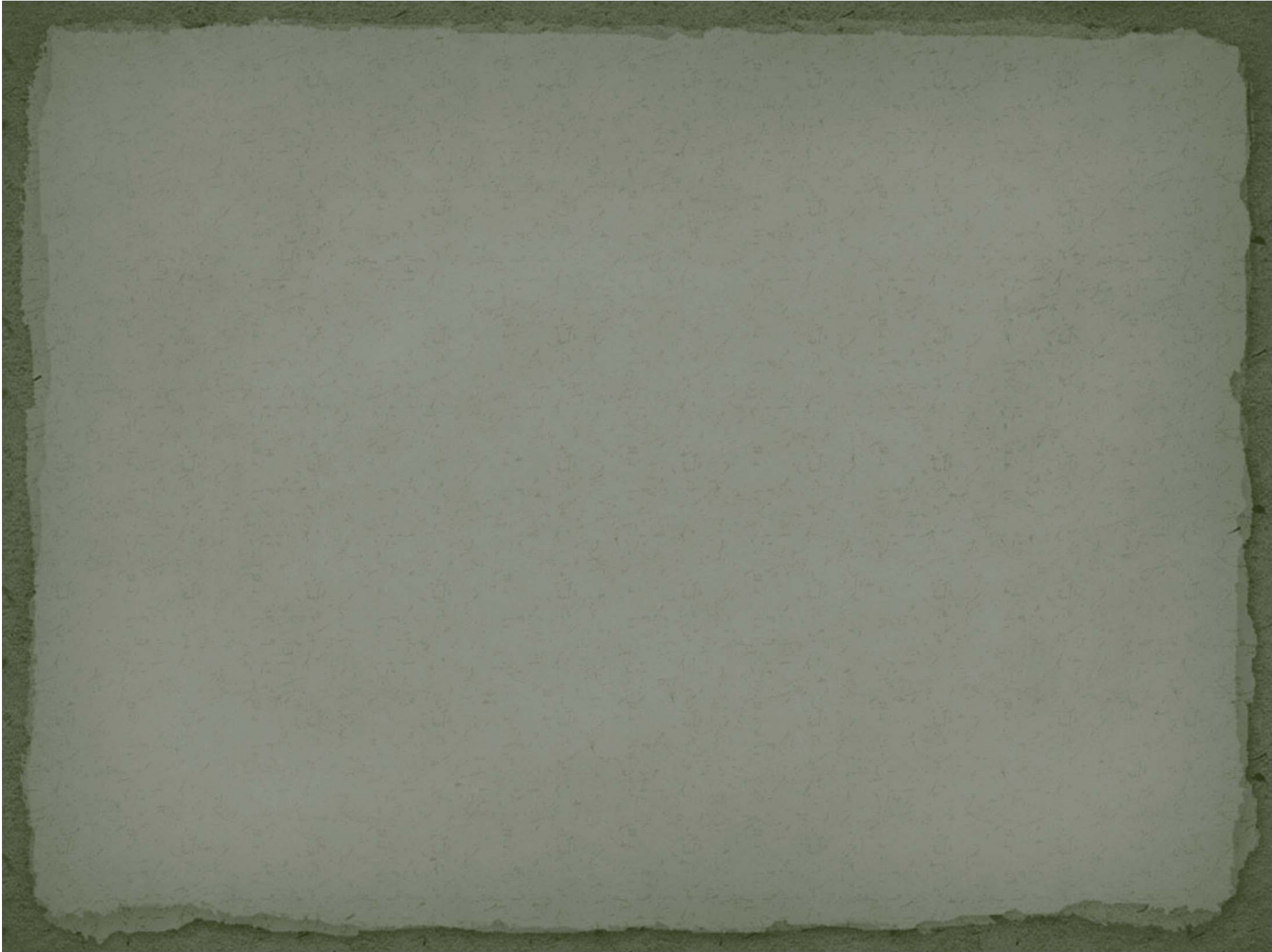






Wegener's Granulomatosis

- Etiology is Unknown
- Involves Upper airway, lung, kidney and skin.
- Nose – Purulent or blood stained nasal discharge, crusting ,granulation,septal perforation
- Destruction of the eye, orbit, palate, oral cavity,oropharynx and sometimes middle ear.



- Lungs – Cough, haemoptysis, Single or multiple cavity in x-ray
- Kidney – red cells, casts, albumin in urine, raised serum creatinin
- Gen symptoms – Anaemia, fatigue, night sweat, migratory arthralgia
- Diagnosis – Biopsy
- T/t – Systemic steroid, cytotoxic drugs
Azathioprine, cyclophosphamide

Non healing midline granuloma

- Believe to be a type of Lymphoma
- Destructive disease in the nose and mid facial region
- Differentiated from Wegener's granulomatosis by absence of pulmonary and renal involvement.
- Diagnosis – Biopsy
- T/t – Radiotherapy and surgical debridement



Sarcoidosis

- Unknown etiology
- Involve – lung ,lymphnode,eye and skin
- Nose – Sub mucosal nodule, nasal pain, obstruction, epistaxis
- Diffuse pulmonary infiltration with hilar adenopathy on x-ray
- Serum urinary calcium level –raised
- T/t – Systemic and local steroid

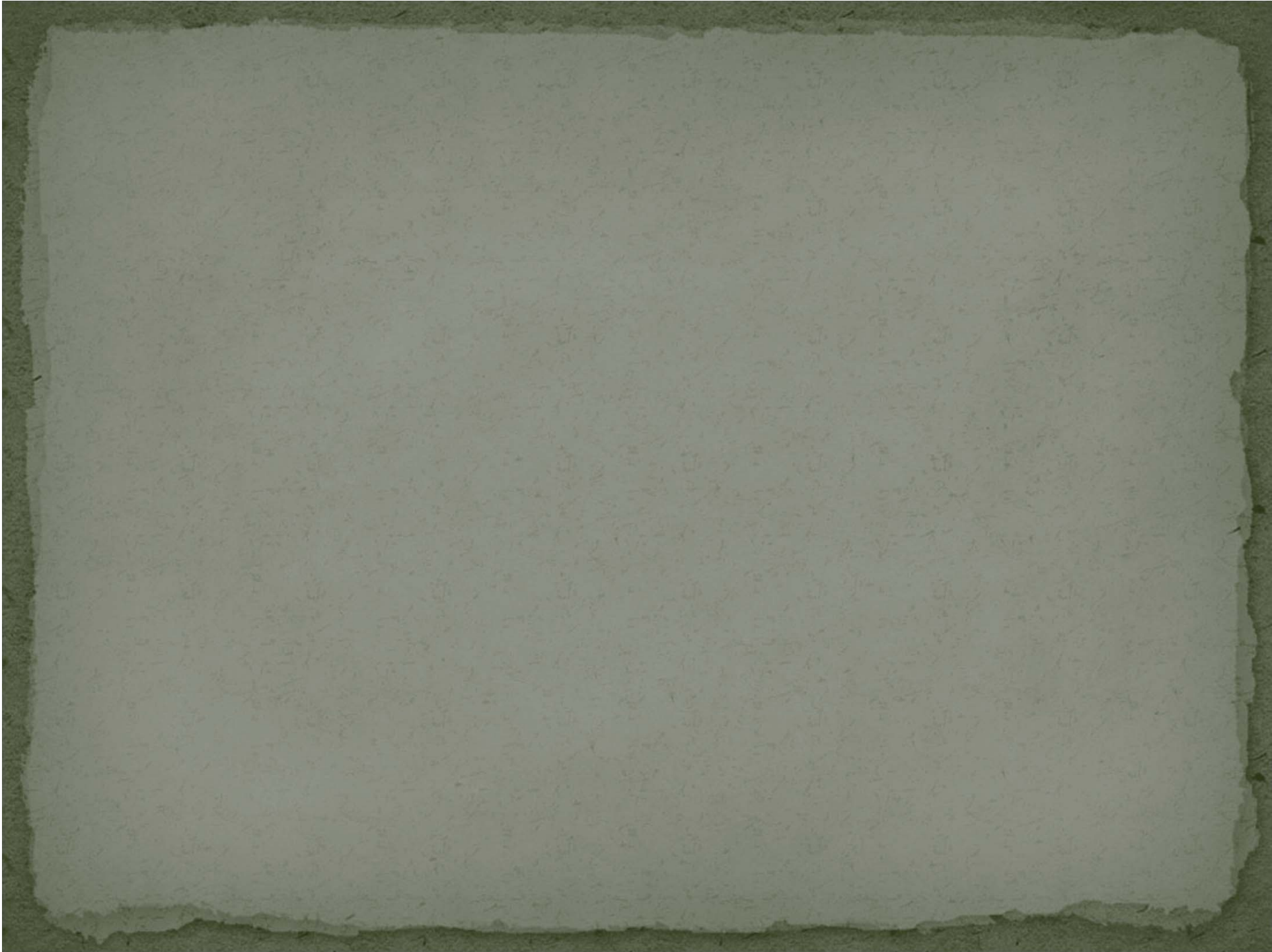


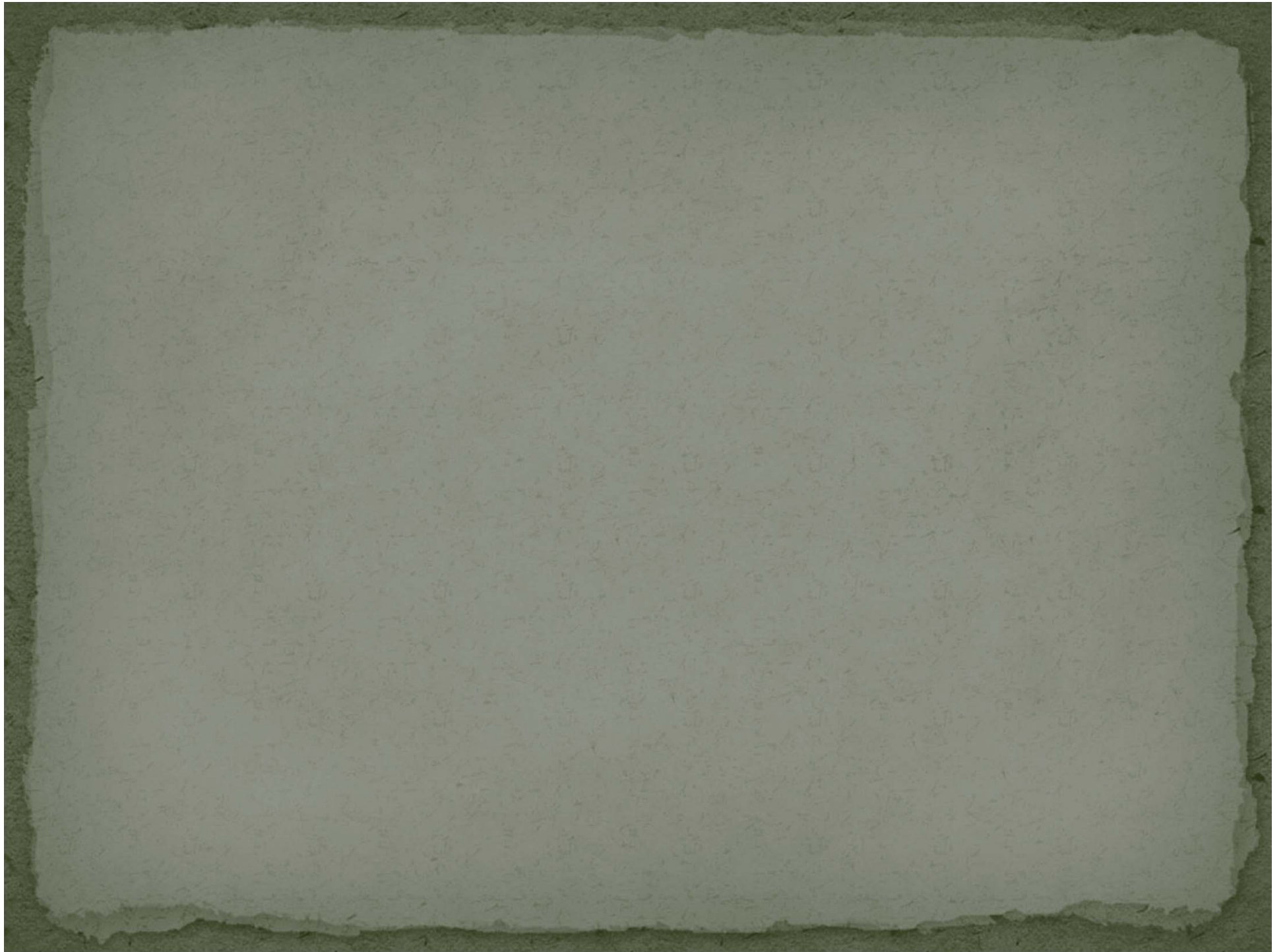
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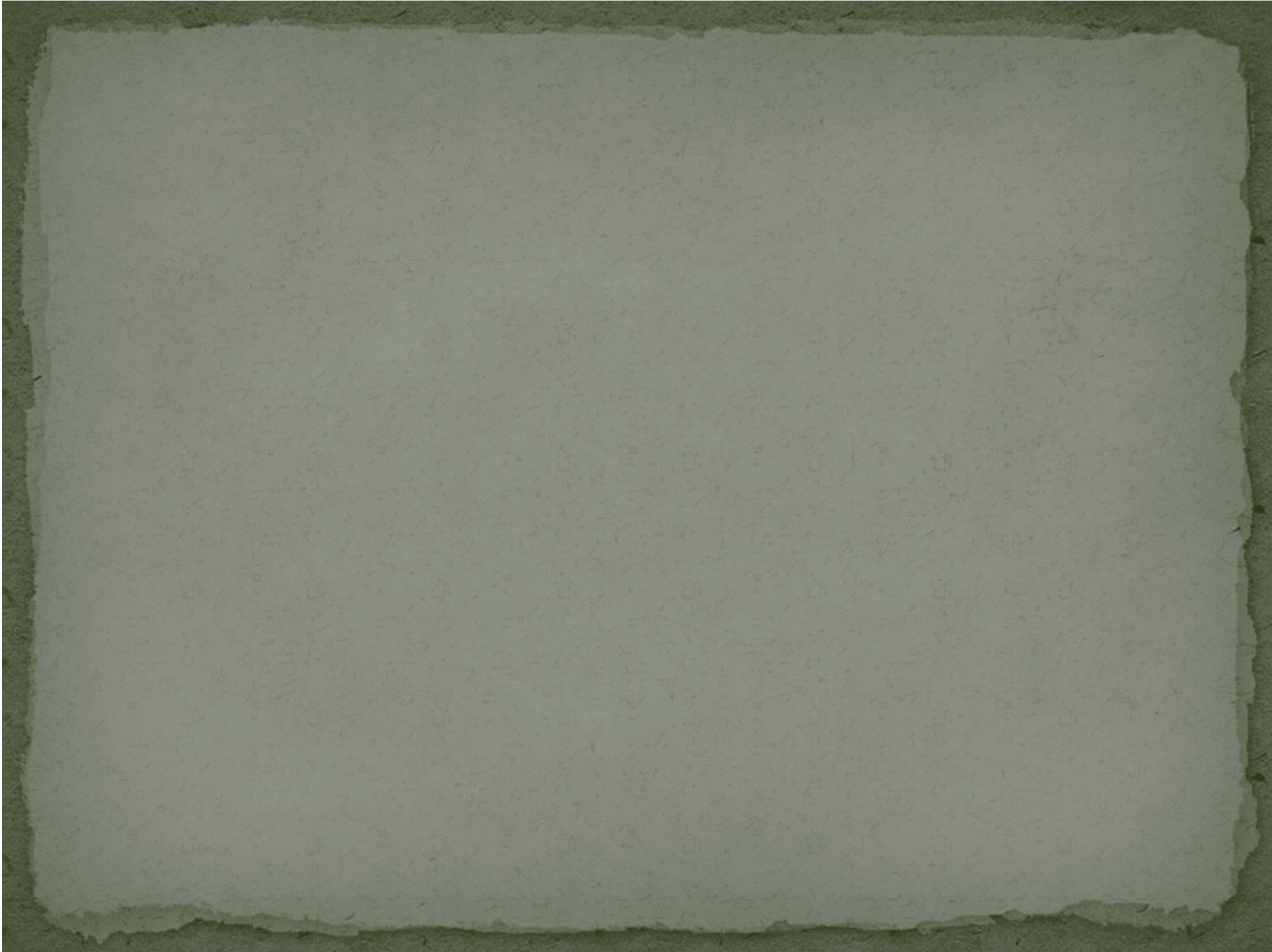
- ▣ **Foreign body of nose**
- ▣ **Rhinolith**
- ▣ **Myiasis of the nose**

Rhinolith

- **STONE FORMATION IN THE NASAL CAVITY**
- **DUE TO DEPOSITION OF THE CALCIUM AND MAGNECIUM SALT**
- **COMMON IN ADULTS**
- **C/F – UNILATERAL NASAL OBSTRUCTION, FOUL SMELLING NASAL DISCHARGE OFTEN BLOOD STAINED**
- **O/E – GREY BROWN OR GREENISH BLACK MASS WITH STONY HARD FEEL FOUND**
- **T/T – REMOVAL UNDER GENERAL ANAESTHESIA**

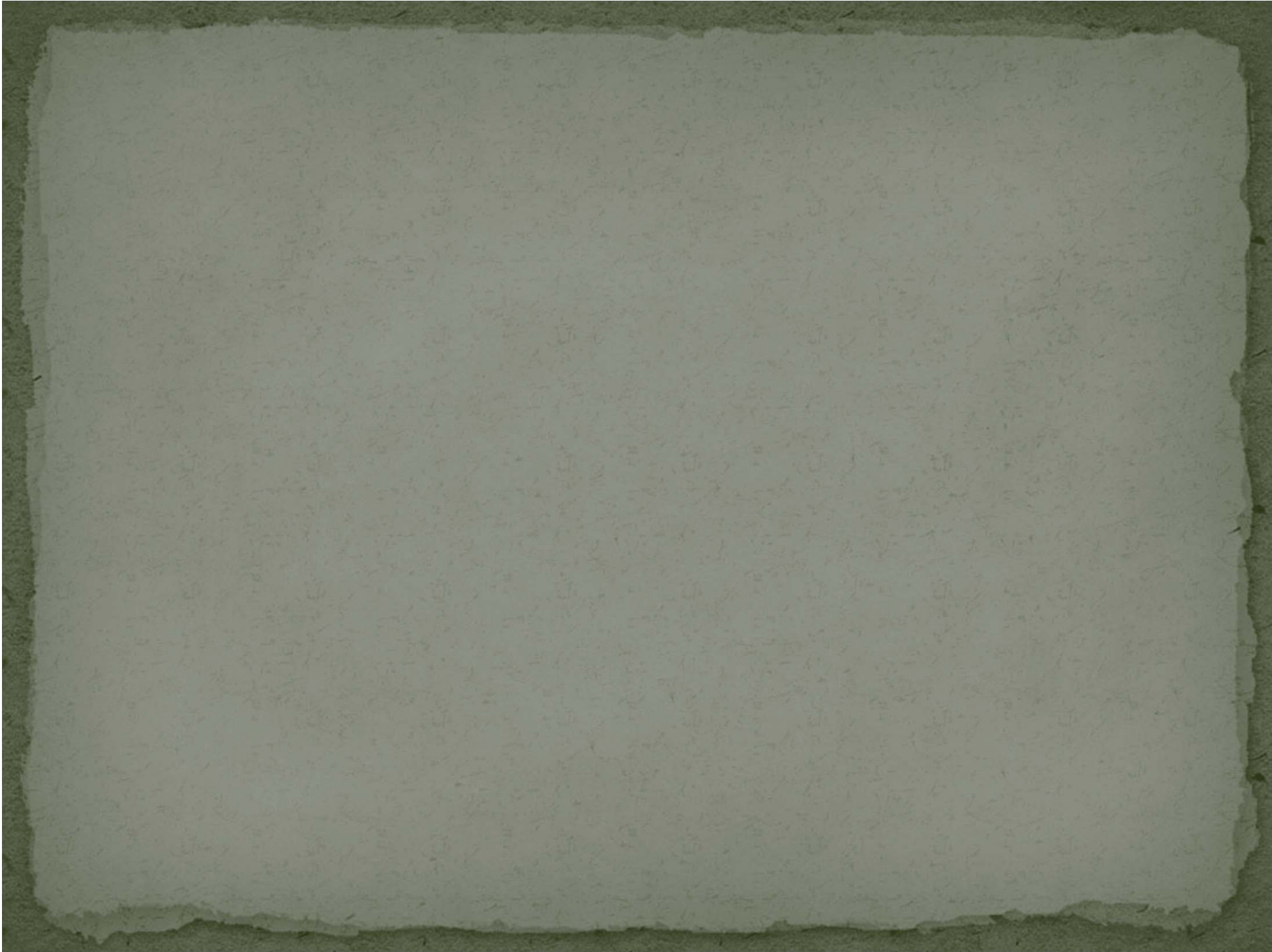


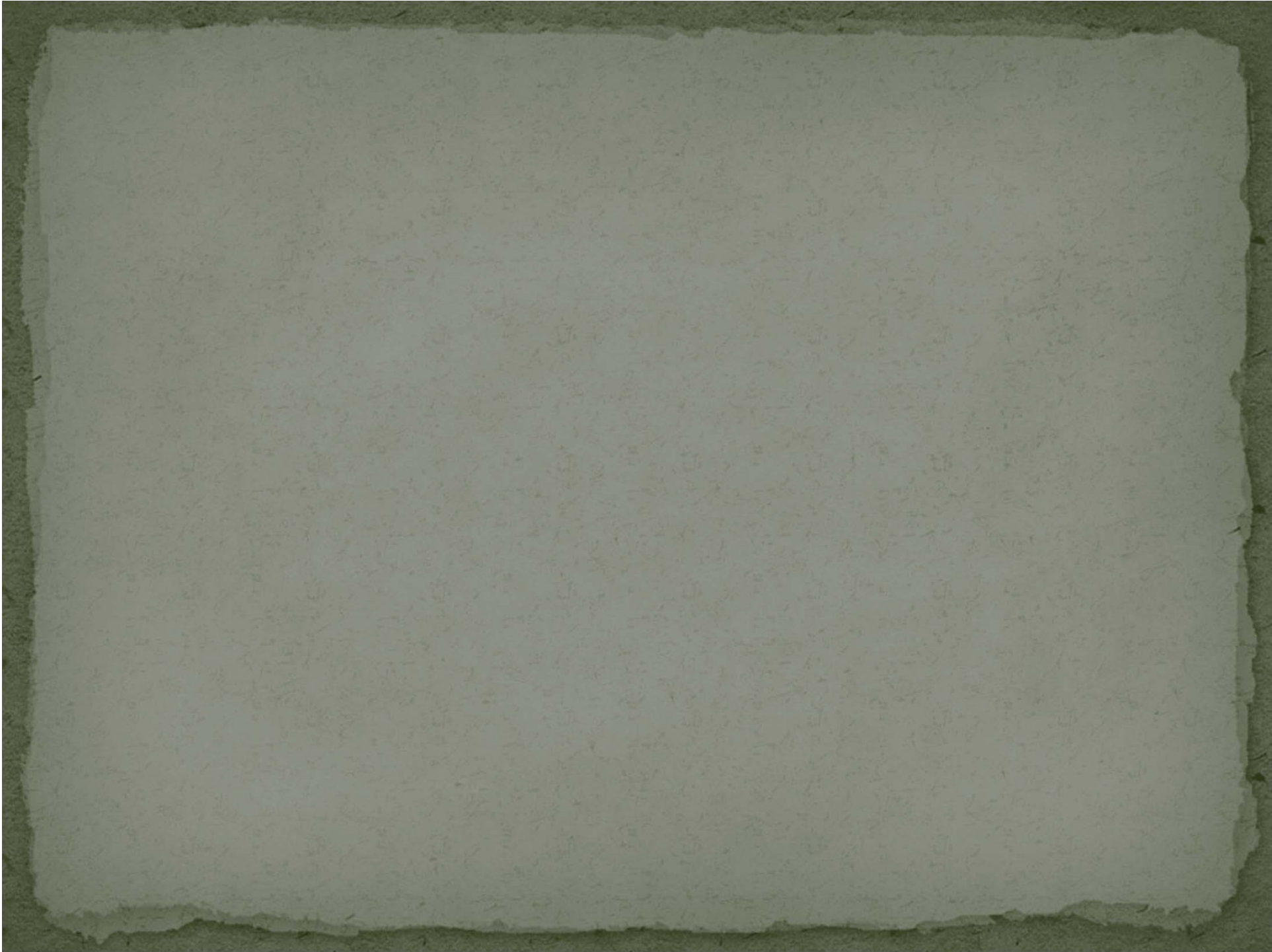




Myiasis of the nose

- Larva form of flies
- Species – Chrysomia
- Secondary to – Atrophic rhinitis, syphilis, leprosy,
- Lays egg 200 at times
- Pain, bleeding nose, and complications
- T/t – Chloroform water, Turpentine oil





THANK YOU