

#### **FACULTY OF NURSING**



### SYSTEMIC SCLEROSIS

Mr. M.Raghavendran M.Sc(N)
Professor
MSN Dept

#### SYSTEMIC SCLEROSIS

 It is a disorder of connective tissue characterized by fibrotic, degenerative and occasionally degenerative changes in the skin, blood vessels, synovium, skeletal muscles and internal organs.

# Etiology

- The exact cause is unknown
- Immunologic dysfunction and vascular abnormalities
- Environmental occupational exposure to coal, plastics and silica dust

# Clinical Manifestations

#### **CREST**

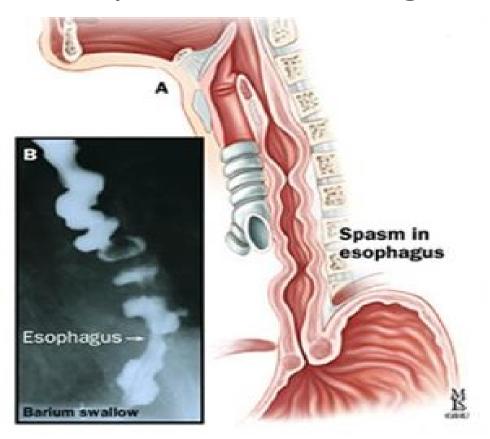
 C – Calcinosis – painful deposits of calcium in the skin



 R – Raynaud's Phenomenon – Abnormal blood flow in response to cold or stress



 E — Esophageal Dysfunction — dysphagia caused by internal scarring



 S – Sclerodactyly – Tightening of the skin on fingers and toes



A B

 T – Telangiectasia – Red spots on the hands, fore arms, palms, face and lips





#### Internal organ involvement

- GIS:
  - Constipation or Diarrhea
- Lung:
  - Pleural thickening
  - Pulmonary Fibrosis and
  - Pulmonary Function Abnormalities

- Heart:
  - Pericarditis
  - Pericardial Effusion
  - Cardiac Dysrhythmias

# Diagnostic Evaluation

- History Collection and Physical Examination
- Anti-Nuclear Antibody Titers
- Anti Centromere Antibody
- Nail bed capillary microscopy
- X rays of Chest
- Skin or Visceral biopsy
- Urinalysis

# Management

- Physical therapy
- Occupational therapy
- Vasoactive Agents
- Calcium Channel Blockers
- NSAIDs
- Corticosteroids