



The Many Faces of Arthritis

Farhan Tahir M.D

Rheumatic Disease Associates

Agenda

- How arthritis affects us today
- Major types of autoimmune diseases
- Snapshot of clinical features and treatment of
 - Rheumatoid Arthritis
 - Lupus
 - Scleroderma
 - Sjogren's syndrome
 - Dermatomyositis
 - Vasculitis

Pierre-Auguste Renoir (1841-1919)



- *"For me a picture has to be something pleasant, delightful, and pretty - yes, pretty. There are enough unpleasant things in the world without us producing even more." ~*



- *"One must from time to time attempt things that are beyond one's capacity." ~ Pierre-Auguste Renoir*

Struggles through Pain





Renoir's *Luncheon of the Boating Party*, 1881



The Umbrellas-1881



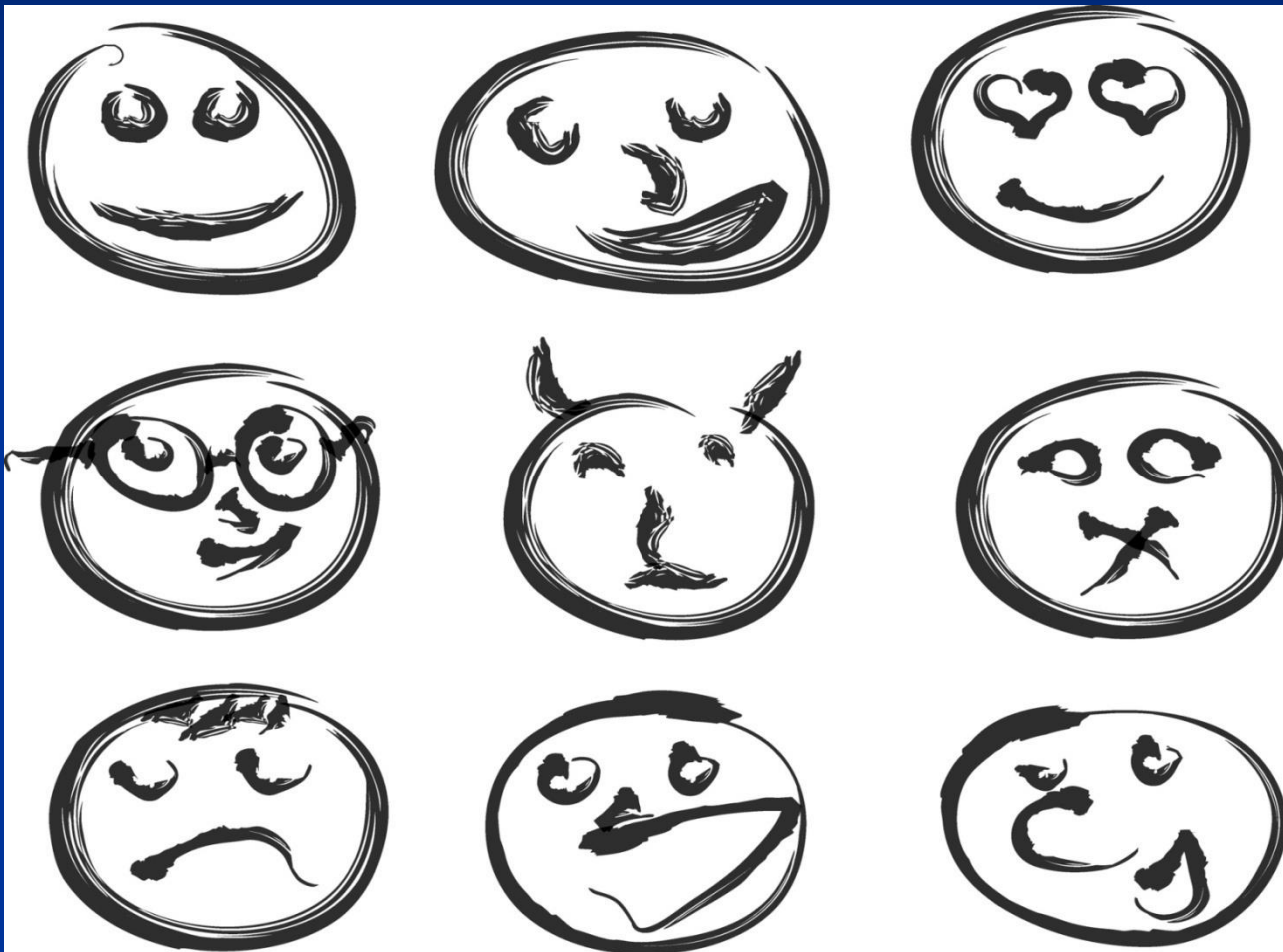
“The pain passes, but the beauty remains.”

~ Pierre-Auguste Renoir

It can affect all of us



It is not pleasant!

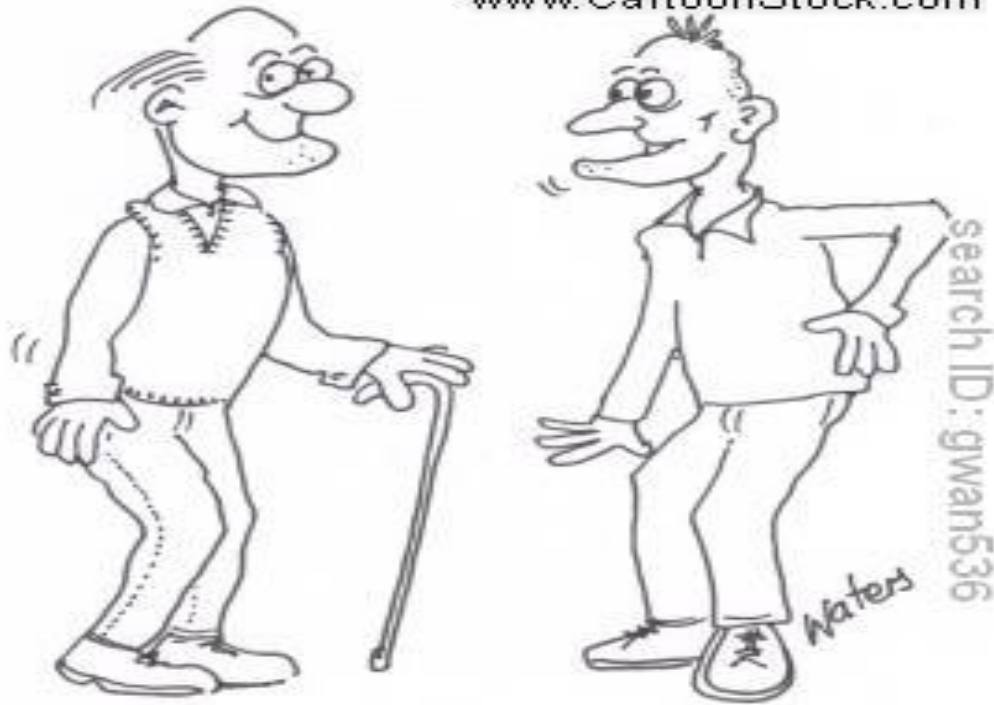


Arthritis does not spare anyone



Arthritis hurts!

© Original Artist
Reproduction rights obtainable from
www.CartoonStock.com



"When you get older everything hurts...
and what doesn't hurt doesn't work!"

Arthritis

- Arthritis is a disorder which can cause mild to severe pain in the joints, joint tenderness and swelling
- Approximately 50 million Americans have some type of arthritis or related condition
- Huge socioeconomic impact on society resulting in costs of \$128 billion annually, and continues to be the most common cause of disability

22% Of US Adults Have Arthritis

Rheumatology
Morning Wire

Prepared exclusively for
members of
 AMERICAN COLLEGE
OF RHEUMATOLOGY
EDUCATION • TREATMENT • RESEARCH

In affiliation with
 CUSTOM
BRIEFINGS

Today's News for the American College of Rheumatology from Newspapers, TV, Radio and Journals

- 50 million people with the joint diseases

Centers for Disease Control and Prevention

MMWR

Morbidity and Mortality Weekly Report

Weekly / Vol. 59 / No. 39

October 8, 2010

**Prevalence of Doctor-Diagnosed Arthritis and Arthritis-Attributable Activity
Limitation — United States, 2007–2009**

- Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation (AAAL) is expected to increase significantly by 2030

Who to blame?

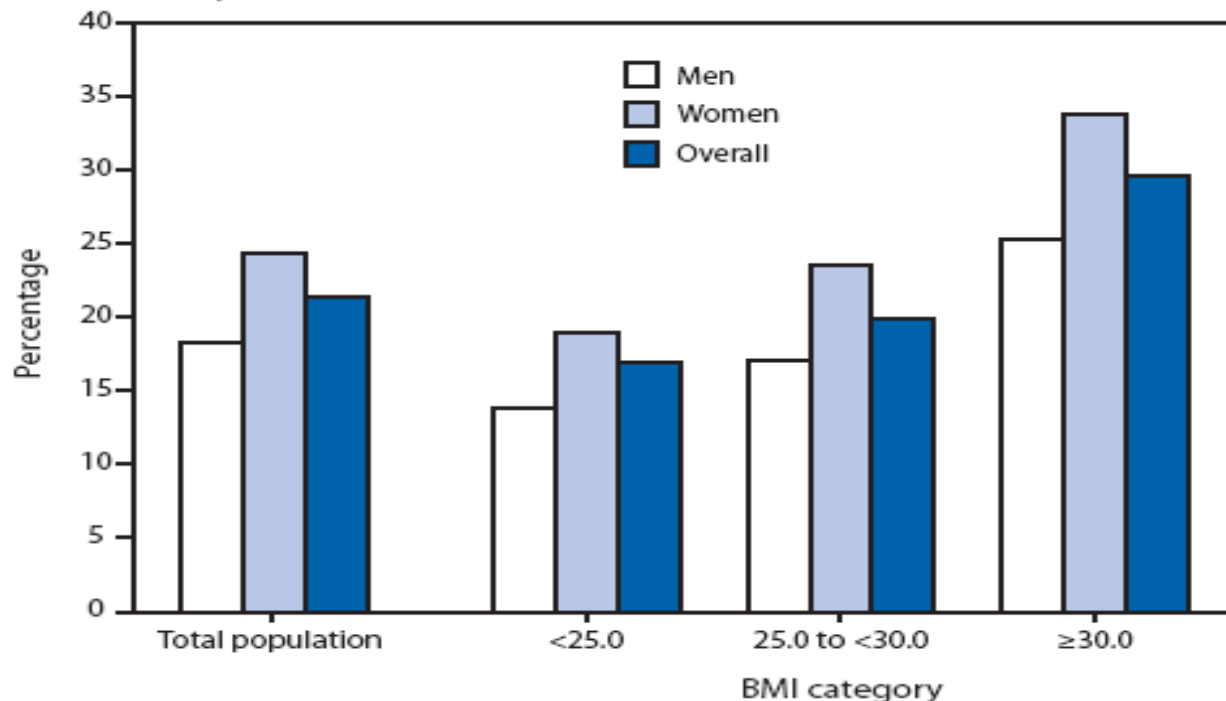
- The driving factor for the rise in arthritis patients appears to be obesity
- Among obese, one in three women and one in four men have arthritis, roughly double the proportion among those whose weight is normal
- " What's more, "obesity particularly plays a role in the onset of knee osteoarthritis, the most common form of the disorder."

National Health Interview Survey for 2007-2009

- Among major findings from the
 - 22.2% of adults aged 18 and older say doctors have diagnosed them with arthritis, 49.9 million people
 - 42.4% of people with diagnosed arthritis, or 21.1 million people suffer limitations on physical activity because of their disease
 - Among the obese, 33.8% of women and 25.2% of men , rates were close to double that of people who are underweight or normal weight, 13.8% for men and 18.9% for women

Findings of Arthritis Survey

FIGURE. Age-adjusted* prevalence of doctor-diagnosed arthritis among adults, by sex and body mass index (BMI) category† — National Health Interview Survey, United States, 2007–2009



* Age adjusted to the 2000 U.S. projected adult population, using three age groups: 18–44 years, 45–64 years, and ≥65 years.

† BMI = weight (kg) / height (m²). Categorized as follows: underweight/normal weight (<25.0), overweight (25.0 to <30.0), and obese (≥30.0).

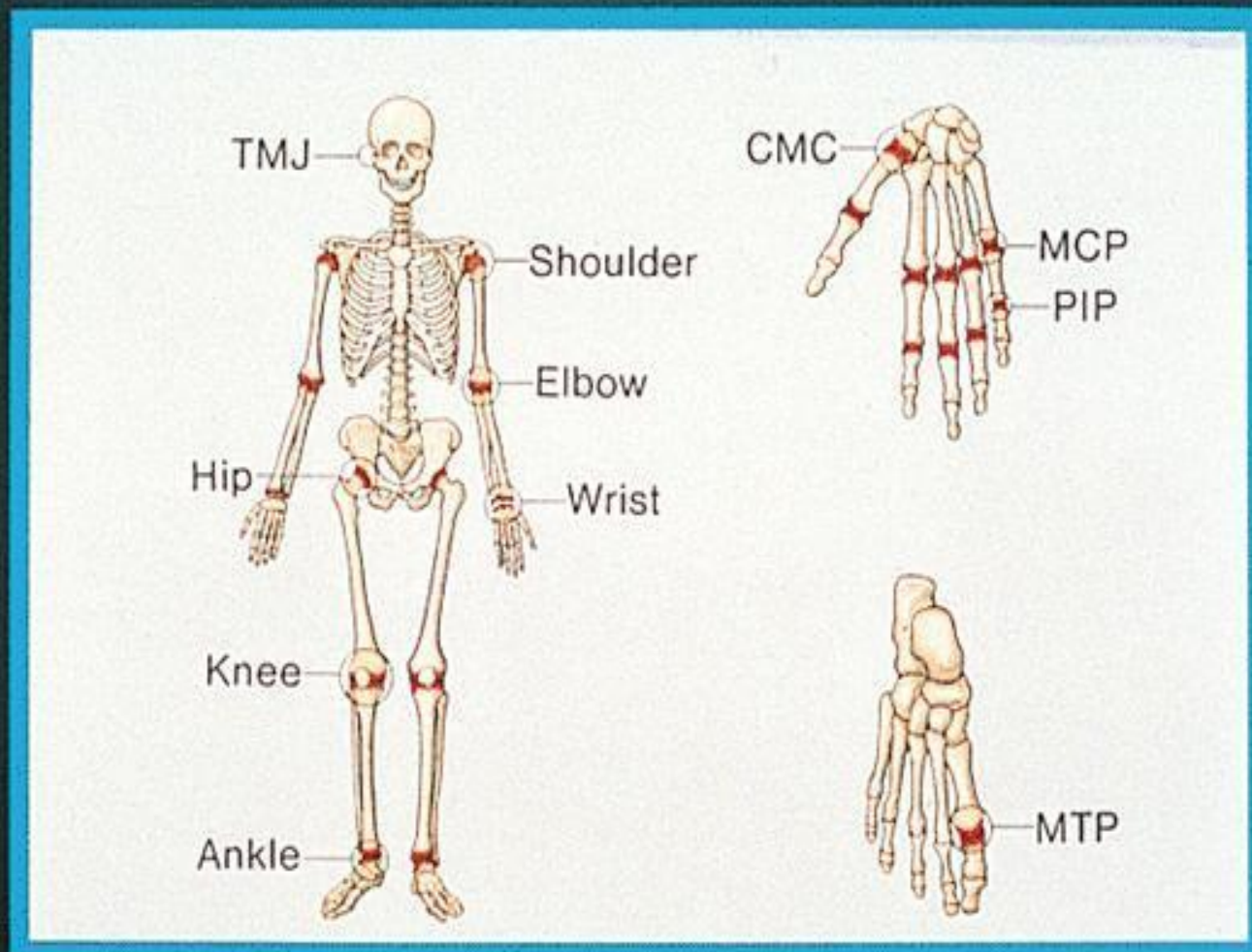
Who is most affected ?

- Focusing on specifics, the investigators noted that "after adjustment for age, the prevalence of arthritis-related activity limitations were highest for
 - Body mass index (BMI) was above 40 (52.9%)
 - With low education levels (52%)
 - Inactive (51.2%)
 - Smokers (47.6%)
 - Non-Hispanic blacks (45.5%)

What's being predicated ?

- "'With the aging population and continued high prevalence of obesity,' arthritis is predicted to increase significantly over the next 20 years
- Projecting are that "the number of adults with arthritis will hit 67 million by 2030"
- Many of these people will "experience arthritis-related limitations in activity"

Arthritis has distinct pattern and



Pattern of joint involvement

Arthritis



OA



RA



PsA



CPPD

Autoimmune arthritis

- Disorder of immune system
- Systemic features-fever, fatigue, weight loss
- Unaffected by inactivity, improves with movement and exercises
- It can affect internal organs
- Rheumatoid Arthritis is the classic example
- Destruction of joint is fast and aggressive

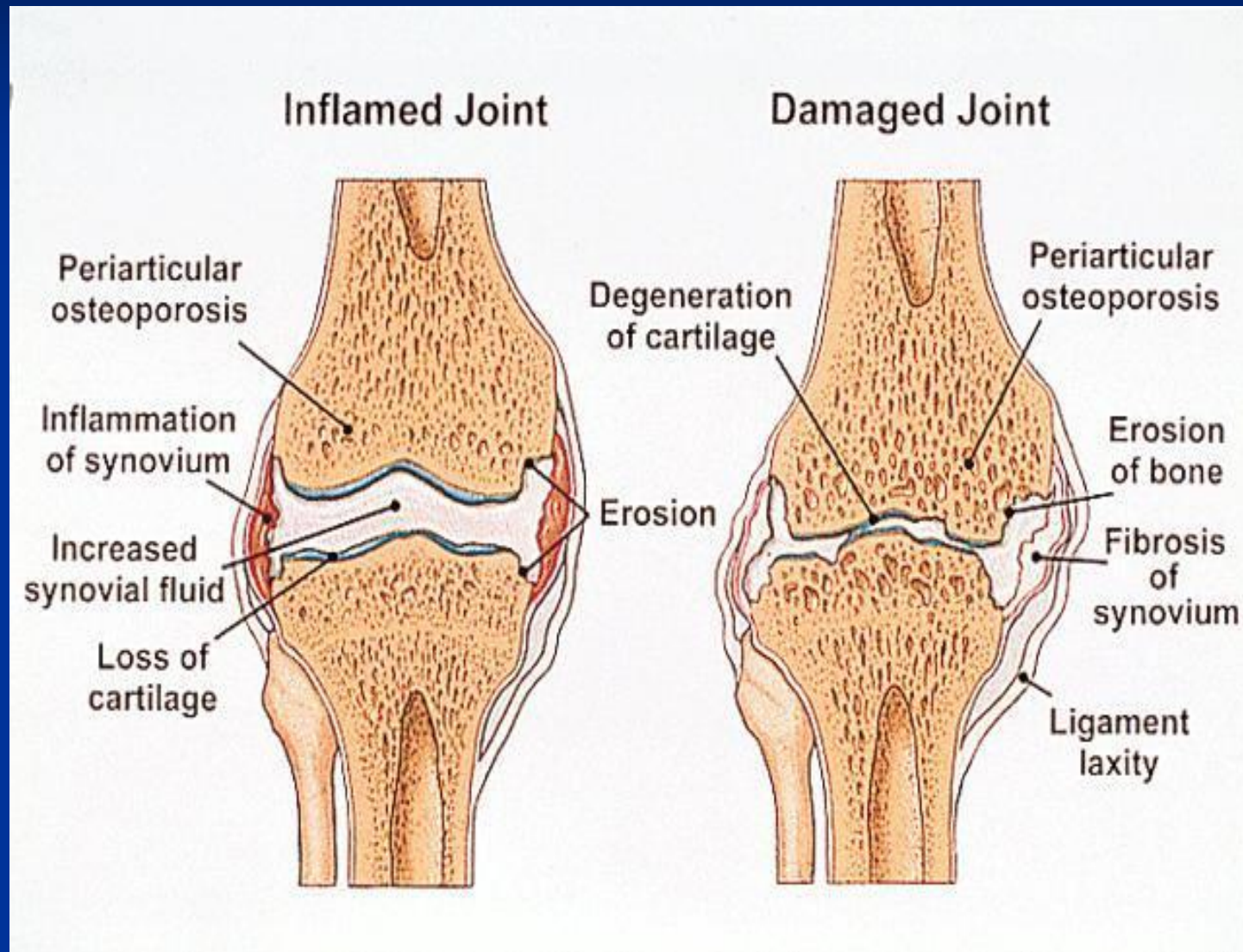
Rheumatoid arthritis

- Chronic type of inflammatory arthritis
 - >8 weeks
 - Additive and progressive pattern
 - Symmetrical or bilateral involvement
- Chronic inflammation can lead to deterioration, pain and limited movement
- Approximately 1.3 million American adults have RA, with women outnumbering men 2.5-to-1.

Cause of Autoimmune arthritis

- Exact cause – Unknown
- Environmental factors triggers the susceptible individual who carry certain genes
- Risk factors
 - female gender
 - Poor dental hygiene
 - Genes
- Triggers include
 - Smoking
 - Viral infection
 - Post partum period
 - Stress

Joint destruction



Rheumatoid arthritis in a young female



Medscape www.medscape.com

Symptoms of Rheumatoid Arthritis

- Early symptoms can occur even before joints
 - Fatigue
 - Early morning stiffness
 - Muscle pain
 - Low-grade fever
 - Weight loss
 - Numbness and tingling in the hands
- Joint swelling, warmth and tenderness

Other faces of autoimmune arthritis

- Lupus
- Scleroderma
- Sjogren's syndrome
- Polymyositis and Dermatomyositis
- Vasculitis
- Fibromyalgia

Lupus

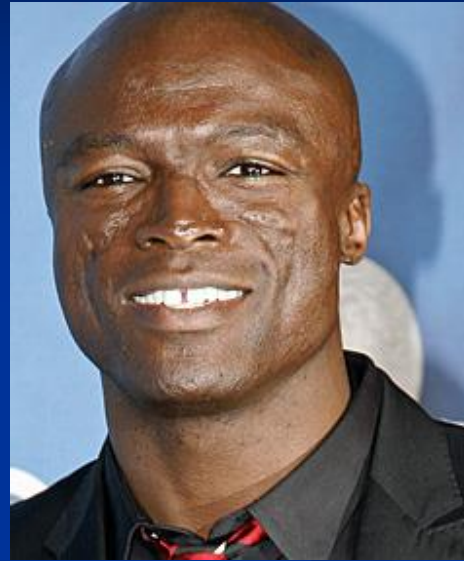
(systemic lupus erythematosus)

- Autoimmune inflammatory disease
- Systemic disease-affect joints, skin, kidneys
- 240,000 Americans -- 90 percent of whom are females
- Women of childbearing age
- More in African American, Asian and Latino populations than Whites

Clinical Features of Autoimmune diseases

- Fatigue, hair loss, dry mouth and eyes
- Muscle and joint pain, muscle weakness
- Fever
- Oral and nasal ulcers
- Raynauds
- Kidney failure and protein loss in urine
- Chest pain from inflammation of lung lining
- Seziures, Headache
- Decreased blood cell and
- Stroke and venous blood clots

Faces of Lupus

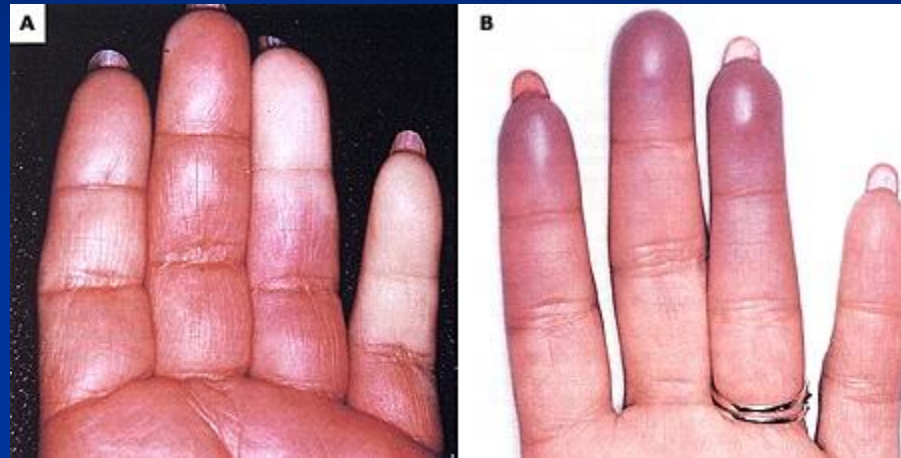


Lupus Skin changes

Malar (Butterfly) rash and oral lesions



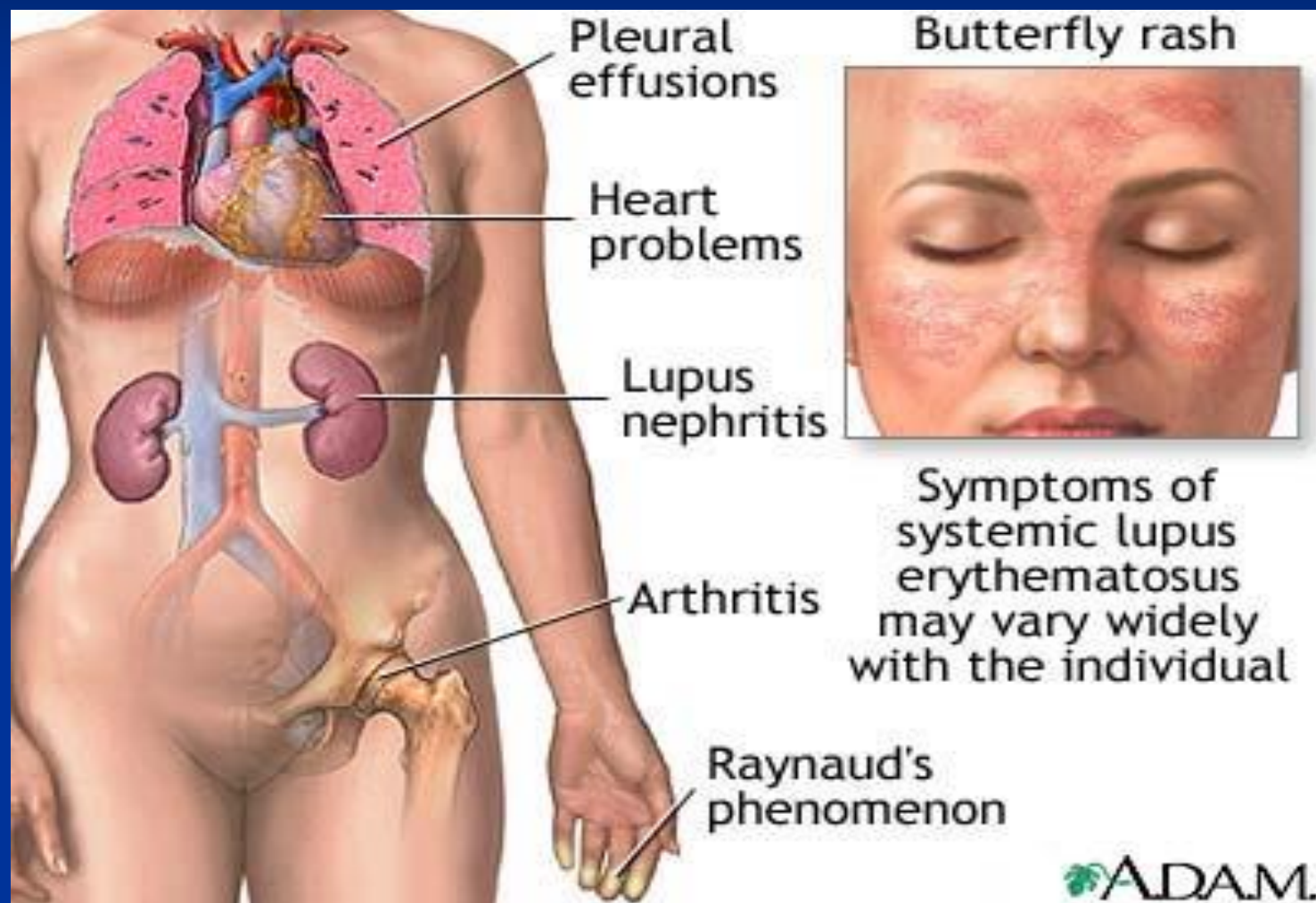
Rash on hands and Raynauds



Lupus can also affect men and arthritis can be deforming

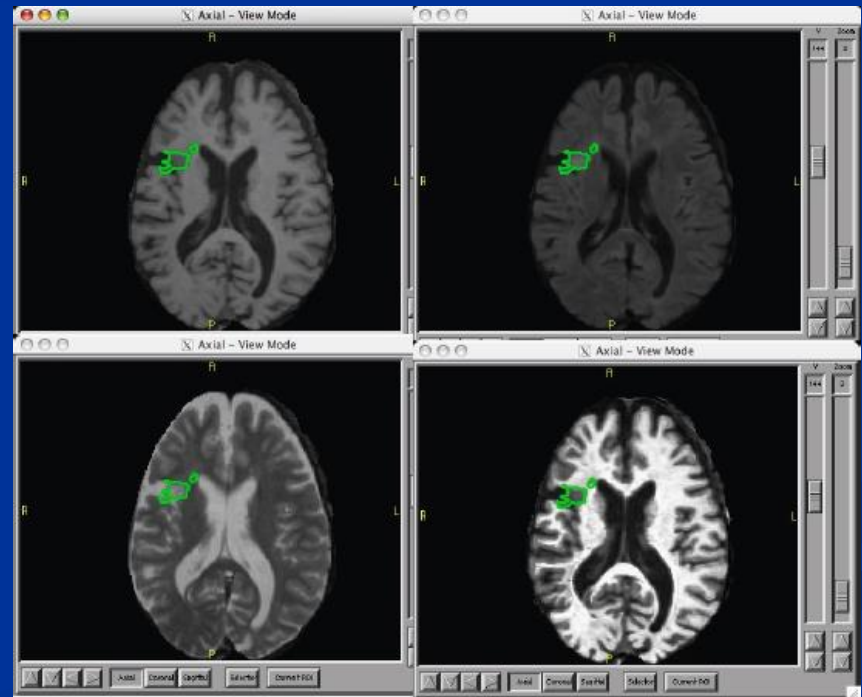
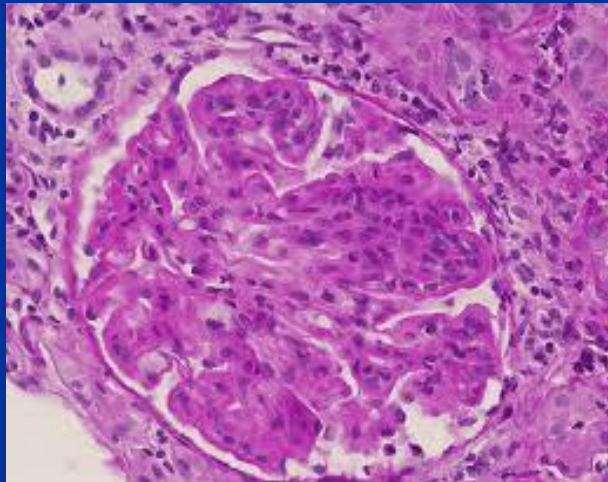


Lupus can involve internal organs



Lupus serious complications

Kidney Failure and Brain damage



Scleroderma

The limited symptoms of scleroderma are referred to as **CREST**

Calcinosis- calcium deposits in the skin



Raynaud's phenomenon- spasm of blood vessels in response to cold or stress



Esophageal dysfunction- acid reflux and decrease in motility of esophagus



Sclerodactyly- thickening and tightening of the skin on the fingers and hands



Telangiectasias- dilation of capillaries causing red marks on surface of skin



ADAM

- Skin thickening
- Heartburn and Reflux
- Difficulty swallowing
- Arthritis
- Raynauds
- Shortness of breath
- Lung scarring
- High pressure on lung arteries

Scleroderma Facies

Younger looking skin



Scleroderma complications

Digital vessel narrowing and ulcers, decreased gut motility
and Lung scarring

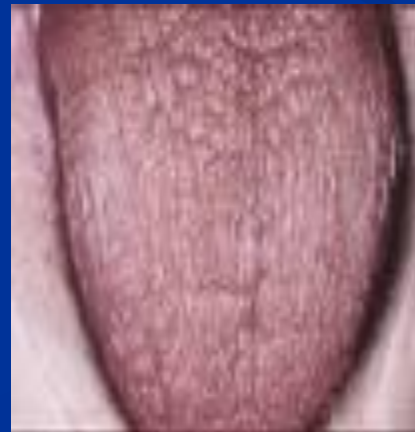
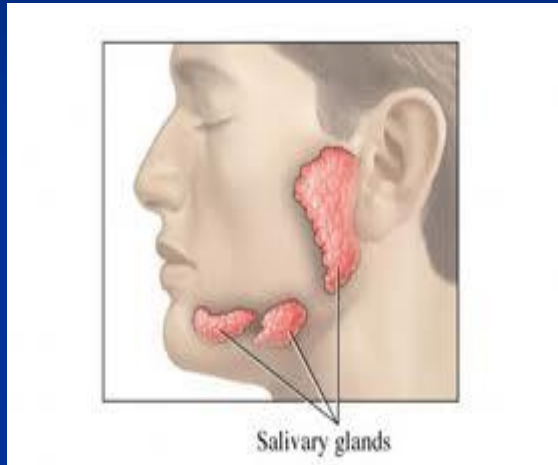


Sjogren's syndrome

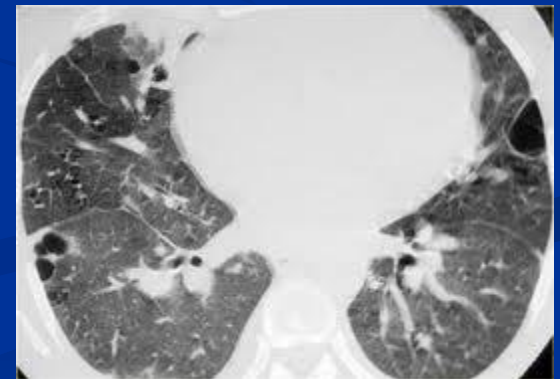
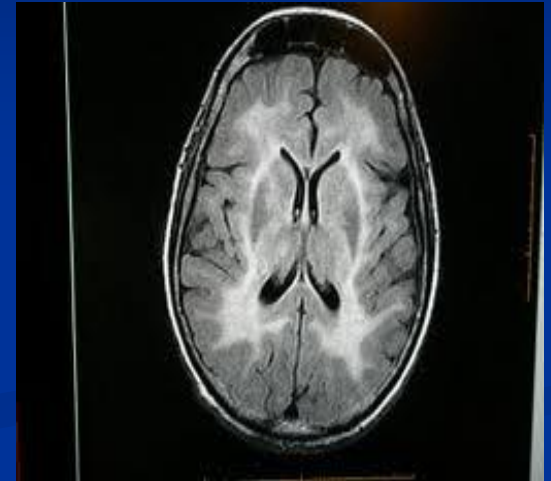
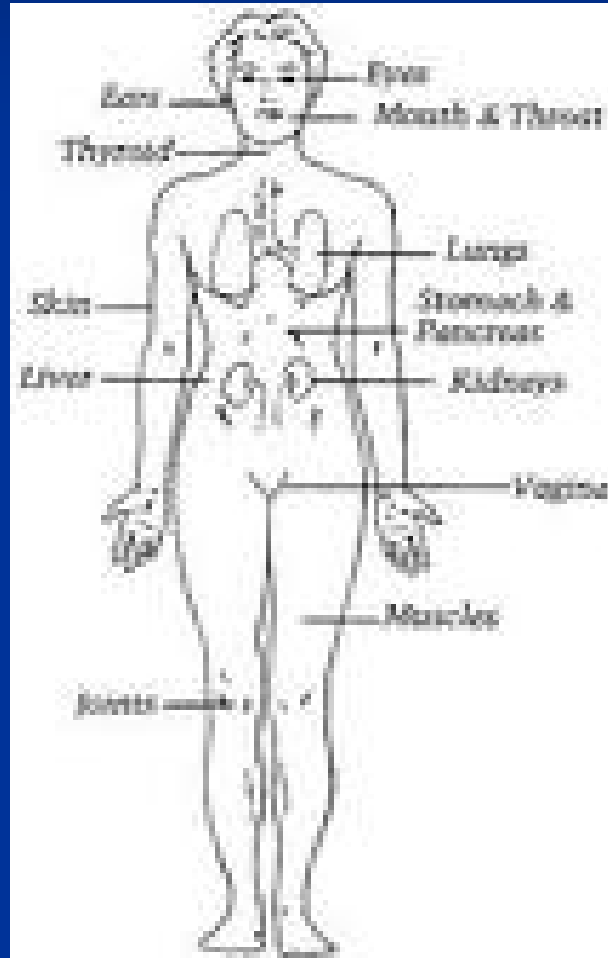
Clinical features

- Dryness of exocrine glands
- Chronic esophagitis
- Oral Candidiasis and dental caries
- Gingival recession
- Weight loss
- Sleep disturbance
- Arthritis
- Raynauds
- Nerve damage
- Lung scarring
- Purpura

Signs of Sjogren's syndrome



Complications of Sjogren's syndrome



Dermatomyositis

- Muscle Weakness in limbs
- Rash
- Swallowing difficulty
- Abnormal CK elevation
- Excessive calcium deposits in skin and muscles
- Lung scarring
- Can be associated with a undiagnosed cancer

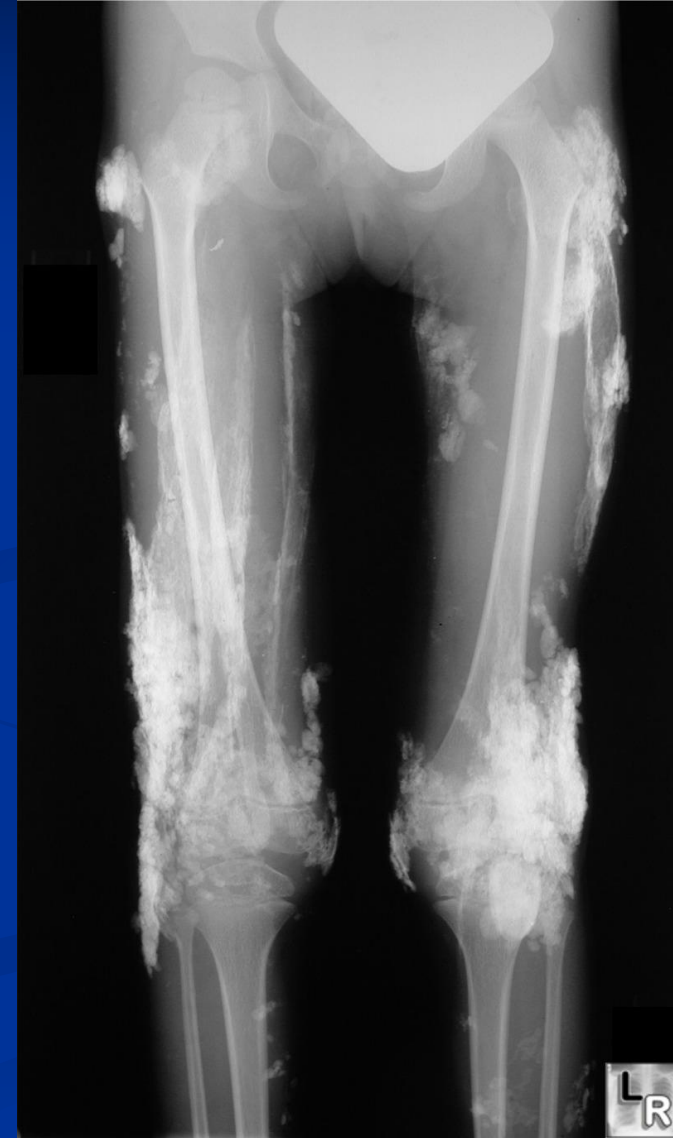
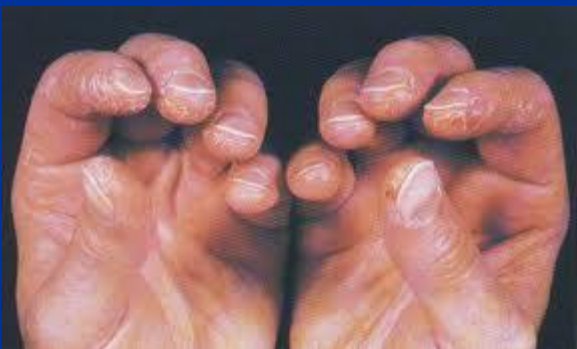
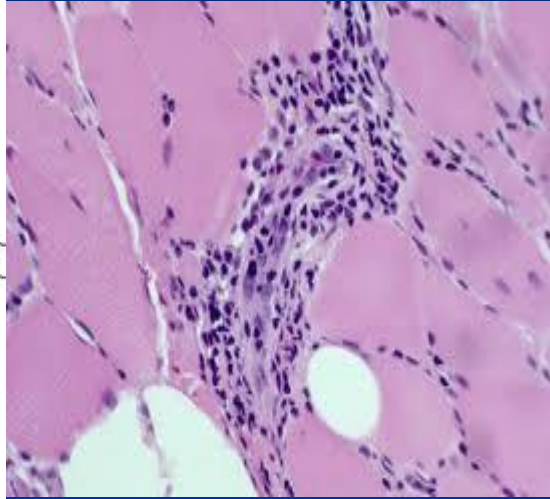
Faces of Dermatomyositis



Signs of Dermatomyositis



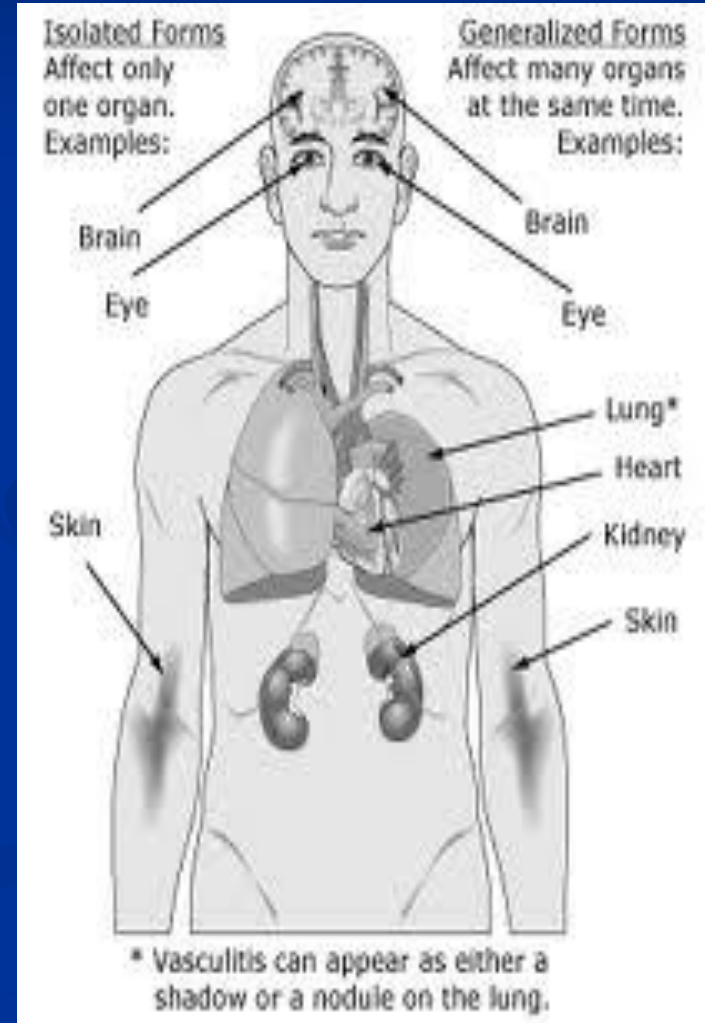
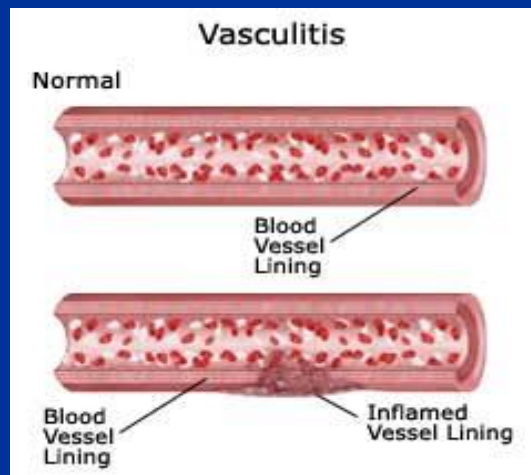
Complications of DM



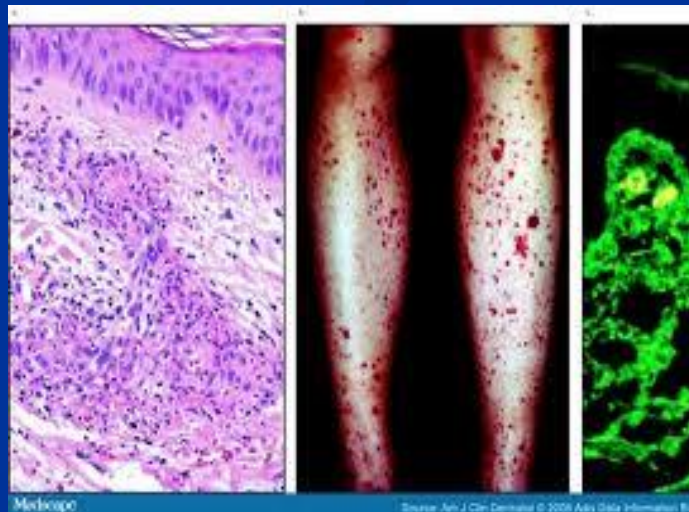
Vasculitis

Clinical Features

- Skin rash
- Sinusitis
- Kidney failure
- Bleeding from lungs
- Nerve damage
- Vision loss



Signs of Vasculitis



Complications of Vasculitis

Wegener Granulomatosis



Gingival changes

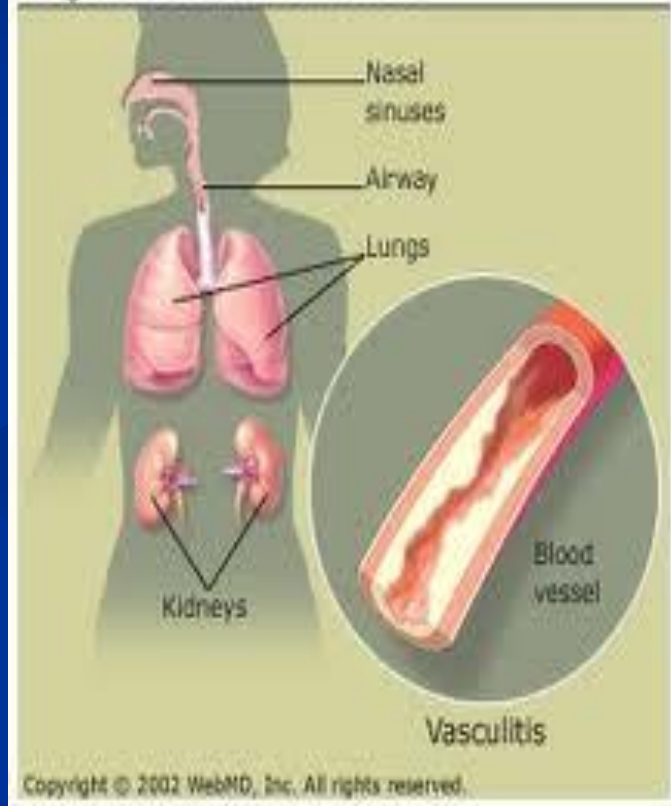


Neutrophil (green) and giant cell (blue) vasculitis

97

© 2007, Michael A. Kahn, DDS, and W. Solomon, DDS

Wegener's Granulomatosis



Benefits of the biologic Therapy

- Individualize treatment options
- Initiate treatment early
- Induction and maintenance of remission
- Steroids, Antiinflammatory medications
- Hydroxychloroquin, Methotrexate, Azathioprine etc
- Use biologics Enbrel, Remicade, Rituxan, Orenica etc

Watch for arthritis related complications

- Osteoporosis
- High blood pressure
- High cholesterol
- Gastritis
- Kidney disease
- Infections
- Cancer
- Depression and Anxiety
- Sexual impairment

Tell us if your Arthritis is active



© Original Artist
Reproduction rights obtainable from
www.CartoonStock.com



searchILDaren45

"At least your arthritis didn't prevent you from opening that jar of pickles!"

What affects your Arthritis



Identify your triggers

- Discuss with your rheumatologist
- Let us know about your other illness
- Protect your self from severe weather changes
- Lack of rest and sleep can impact your arthritis

Nutrition and Dietary Therapy

- Adequate calories and nutrients
- Fish oils and plant oils
- There is no diet that can cure rheumatoid arthritis so treatment is necessary
- There are no herbal or nutritional supplements can cure rheumatoid arthritis

Role of regular exercises

- Regular exercise prevents contracture of joints
- Build strong muscle and tendons
- Use of joint protectors and splints
- Rest and stress reduction
- Weight loss is recommended for overweight and obese people

Exercise and Stay Active



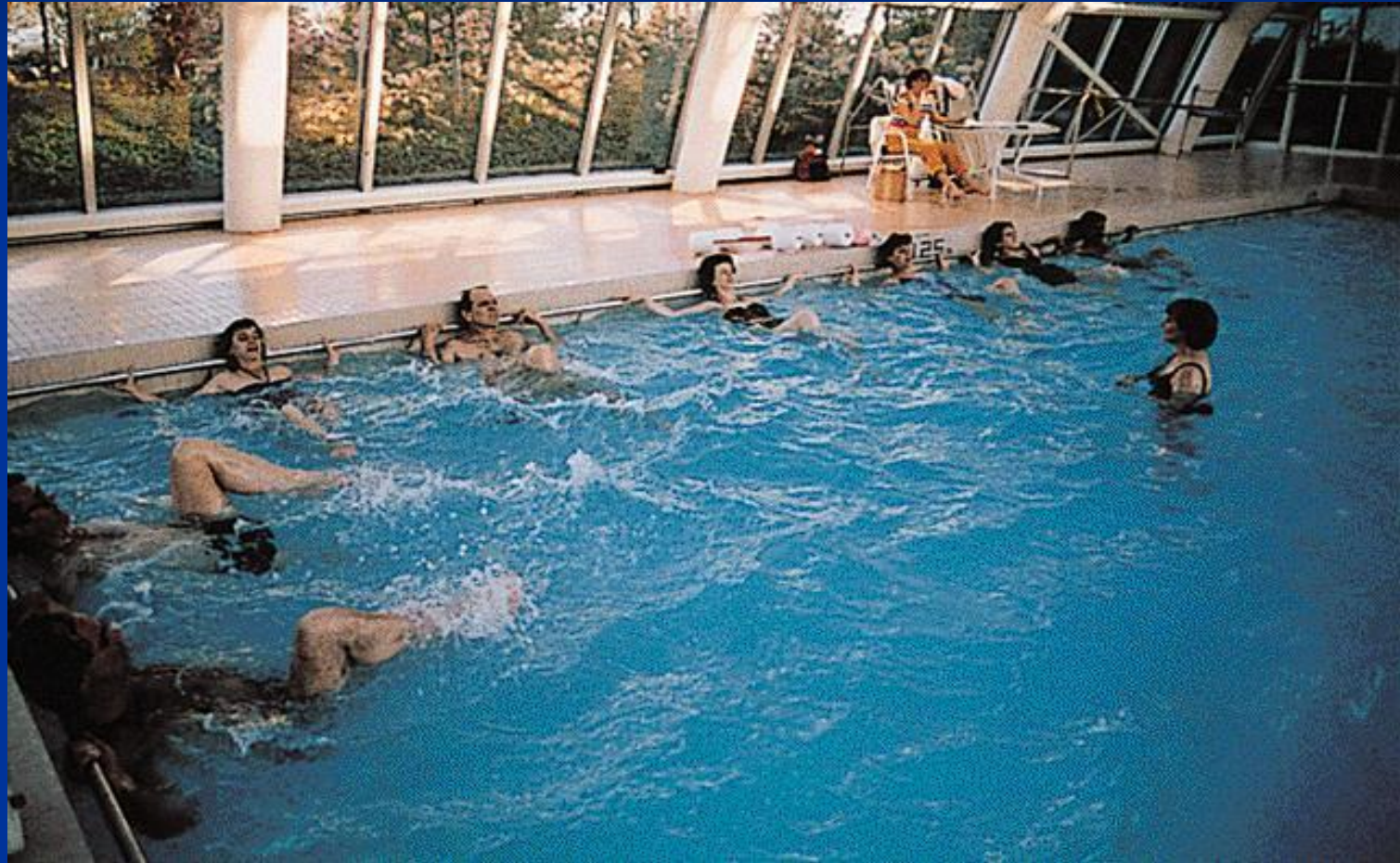
Community Resources



Physical therapy



Swimming and Aquatic therapy



How can you help yourself ?

- Keep a diary of your symptoms
- Bring up your concerns
- Ask questions
- Take medication as advised
- Be open if you have doubts



Help is around you



- Correct diagnosis and treatment will lead to better results
- Regular visits for assessing progress
- Our offices have ultrasound and infusions
- Leading center for cutting edge treatment and research trials
- You can sign up for doctors email account
- Assistance programs for eligible patients

Look for these resources



We all can make a difference

"the prevalence of arthritis could be reduced, at least in part, by greater promotion of effective physical activity, obesity prevention and self-management education programs in local communities."



Our Community, Our Patients, Our Inspiration

Online Resources

- Arthritis Foundation
 - www.arthritis.org
- WebMD
 - <http://arthritis.webmd.com>
- Fibromyalgia
 - www.Knowfibro.com
- Rheumatic Disease Associates
 - www.arthritispa.com
- Institute for Hand and Upper Extremity Rehabilitation
 - <http://www.handinstitute.com>
- Informative web based show for RA
 - www.newwayra.com