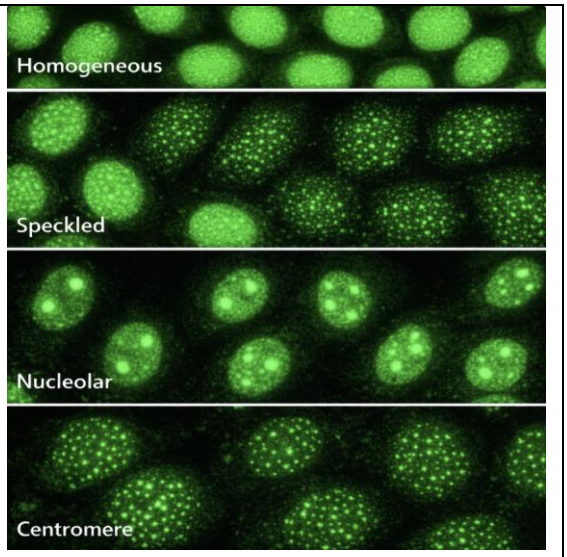
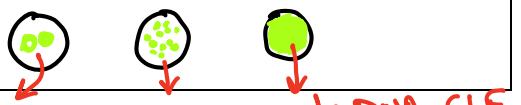
ANA Patterns

Homogenous Uniform bright staining	Anti ds DNA, Anti histone
Specked Granular dots in nucleus	Anti-sm and anti RNP, SSA SSB
Nucleolar	Anti Scl-70 for scleroderma
Centromere Polka dot nucleus	Anti centromere CREST

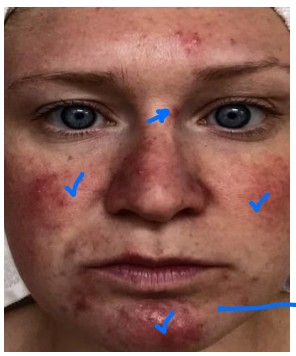




Q. Male female ratio of 1:1 in seen in which of the following?

a. Systemic lupus erythematosus
b. Discoid lupus erythematosus DLE
c. Drug induced lupus nephritis DILE
d. Lupus nephritis

Q. Young female presents with following lesion that worsen after hot drinks and going in sunlight



COMEDONES

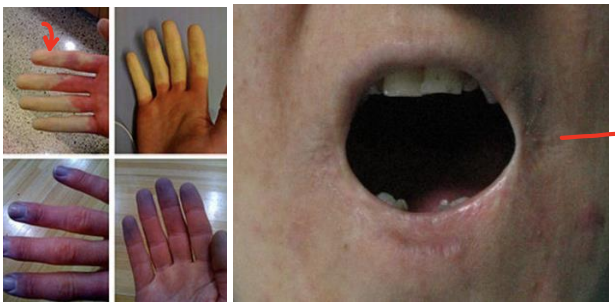
FLUSHING episodes

acneiform

SUN BURN (Ro Antibody)

a. SLE
b. DLE
c. Scleroderma
d. Acne rosacea

Scleroderma



+ VC
deoxy Hb ↑
+ VD

- Screening test for SSc is _____

_____ is the earliest and most common extra cutaneous manifestation of scleroderma

- High risk of B-cell NHL ↑

-Leading cause of death in Scleroderma is _____

- DOC for scleroderma crisis is _____

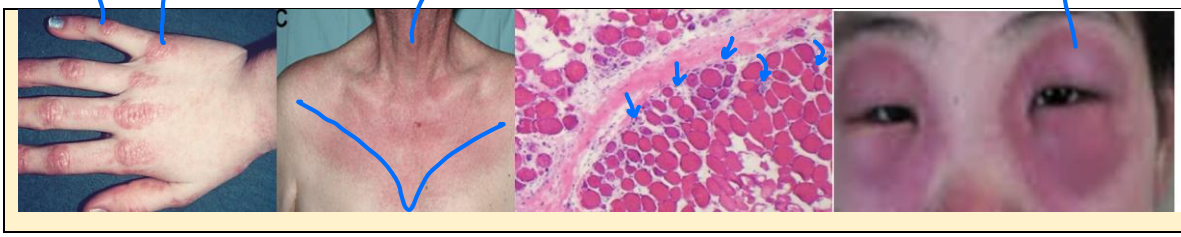
-Scleroderma renal crisis is associated with anti _____ ___antibody

CREST syndrome

Antibody of choice is Anti centromere antibody

Esophageal dysmotility more common than in SSc

Dermatomyositis



- ✓ Most specific antibody seen is anti _____
- ✓ Anti PM-Scl antibody is associated with PM with scleroderma overlap
- * Most specific antibody associated with malignancy seen in dermatomyositis is _____ also called anti 155/140
- * Anti MDA-5 associated with rapidly progressive ILD
- Initial investigation to be done is CK levels
- Increased risk of _____ cancer in dermatomyositis

Clinical features

D – Difficulty climbing stairs (proximal muscle weakness)
E – Elevated CPK
R – Rash (heliotrope rash)
M – Malignancy association
O- Gottron papules
S- Shawl sign

* SLE depression/psychosis: Anti Ribosomal-P antibody

Mixed connective tissue disorder MCTD

Required

- Anti-U1 U1 Ribonucleoprotein Ab _____antibody

*

Clinical overlap features from ≥2 diseases:

- **SLE-like:** arthritis, malar rash, serositis
- **Scleroderma-like:** Raynaud, sclerodactyly
- **Polymyositis-like:** proximal muscle weakness, ↑ CK

♀

RTA 1

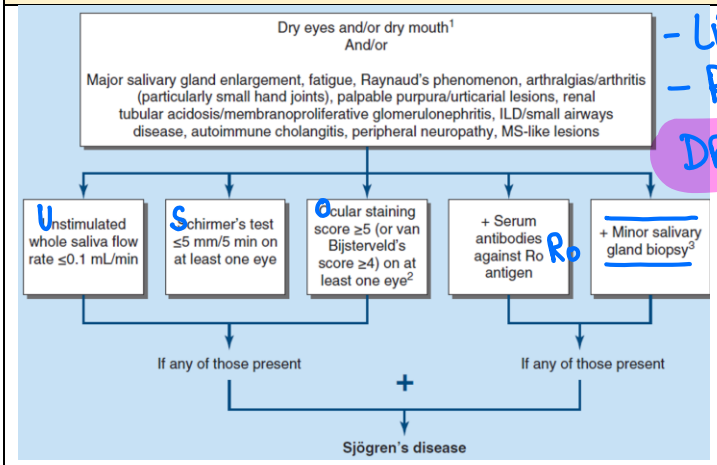
↑

Sjogren syndrome

Mnemonic: USE_ROME

♀: DRY EYE: Methylcellulose eye drops

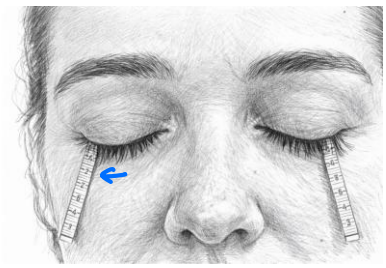
- SCHIRMER: wetness: < 5mm at 5min
- TBUT: FLUOROSCEIN dye: evaporation < 10 sec



- LISSAMINE
- Rose bengal

FLOWER

DRY MOUTH: Salivary flow ↓



-HLA DR3 association

*

-Secondary sjogren is associated with Rheumatoid arthritis ✓

PIP, MCP, WRIST B/L

✓ -Extraglandular involvement seen is arthritis

Risk of lymphoma is ~5–15× higher than general population

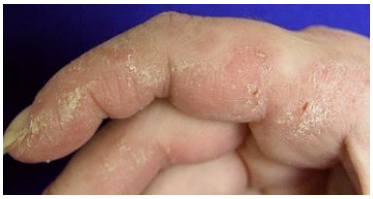
Most common type: Extranodal marginal zone lymphoma (MALT) of salivary glands *

Typically arises in parotid gland ✓

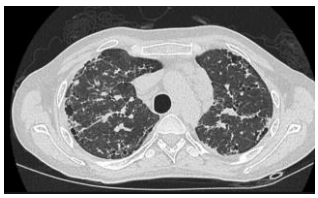
MALTOMA: STOMACH, NHL B cell: H.pylori

Anti synthetase syndrome

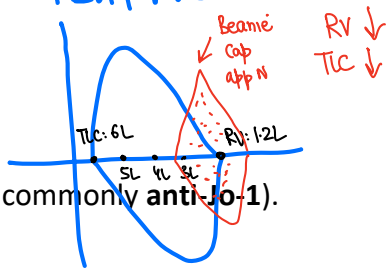
Mechanic hand



Pulm. FIBROSIS — DLco: ↓



FEV1 / FVC > 0.8



antibodies against **aminoacyl-tRNA synthetases** (most commonly **anti-Jo-1**).

tRNA

Classic core features

1 -Inflammatory myopathy (PM or DM phenotype)

2 -Interstitial lung disease (most important cause of morbidity)

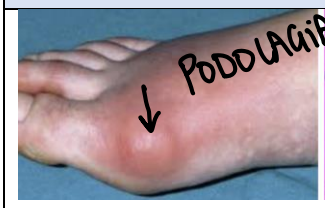
3 -Non-erosive arthritis

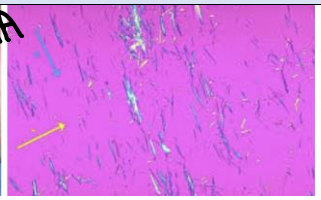
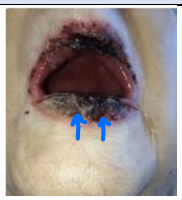
4. -Raynaud phenomenon

5 -Mechanic's hands (hyperkeratotic palms)

Arthritis

Gouty arthritis




Crystals of = Monosodium URATE CRYSTALS (MSUD)

> 50 yo ♂

Thiazides
K↓ Mg↓
M. alkalosis
Sugar ↑
lipids ↑
uric acid ↑

Triggers

- HTN with Thiazides *
- ATT → Pyrazinamide
- Alcohol binge with non veg → PURINE Rich diet

C/F

1. -Fever with difficulty in ambulation — Ankle swelling
   1st MTP ↓
   -Severe pain at base of big toe/ ankle / knee ✓ ✓
2. FEVER HG

IOC Joint aspiration ⇒ m/e: 10,000 PMN +, TURBID (Synovial fluid)
S. URIC Acid: NORMAL
L/M: needle shaped crystals
P/M: negatively birefrigent crystals

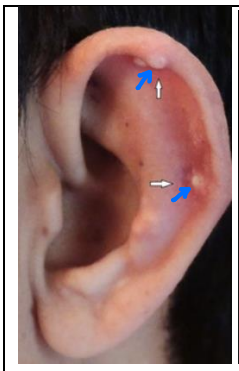
DOC
✓ INDOMETHACIN
✓ COLCHICINE: S/E: diarrhea

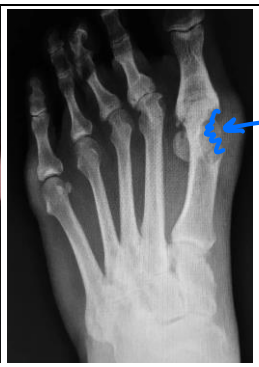
Chronic gout
✓ ASPIRIN HIGH DOSE >2g: uricosuric

allopurinol CI acute gout

-Tophi, S. URIC Acid ↑

Uric Acid ⊕ skin: TOPHI





RAT bite ulcer
MARTEL SIGN

-Nephrolithiasis

urine "No particular shape" o/
m/e: — needle *

Work up

S. Uric Acid ↑
24 hr urinary Uric Acid

↑ * OVERPRODUCER
Allopurinol, febuxostat

↓ UNDER-EXCRETORS
Probenecid

Rx

Allopurinol is CI → acute gout

allopurinol
Lamotrigene
sulpha

: RASH + Hemorrhagic crusting lips = SJS
<10% BSA
>30% BSA + " " = TEN

10-30%
SJS-TEN overlap

Pseudo gout

MC joint involved Knee joints

Calcium pyrophosphate crystals

Polarized microscopy features ⊕ birefrigient crystals

Rx: STEROIDS

STK 11 gene
* HYPERPIGMENTATION lips
anus
* Hamartomatous Polyps: Jejunum
* family H/o: pancreatic Ca
Hepatobiliary Ca Risk ↑

PJS
ch 19

Polarized microscopy cannot identify crystals of calcium oxalate

High dose salicylates don't cause uric acid retention ✓

XRay

Martel sign is seen in chronic gout and is called rat bite erosion ✓

USG findings of MTP involvement is called double contour sign

Extra mile

Factors precipitating gout

Mnemonic: **CAN LEAP**

1. Cyclosporine
2. Alcohol binge and Aspirin low dose
3. Niacin
4. Lasix and Thiazides
5. Ethambutol

Alcohol long term

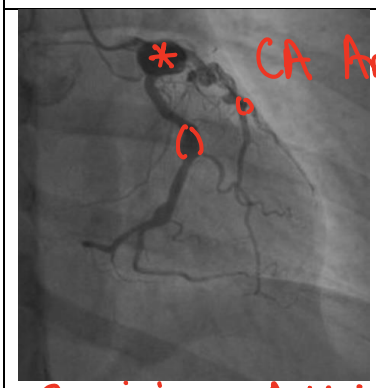
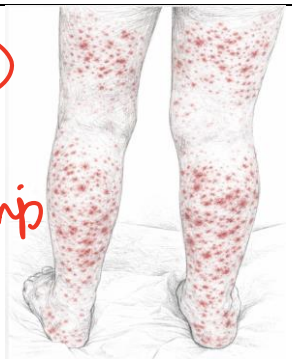
Pyrazinamide, purine rich diet

↳ Idiocutaneous Cutaneous Vasculitis

MCC of vasculitis in adults:

↳ (INDIA) : KAWASAKI : Coronary A Vasculitis

MCC of vasculitis in children ↳ (USA) : H.S.P ↕ NON THROMBOCYTOPENIC PURPURA

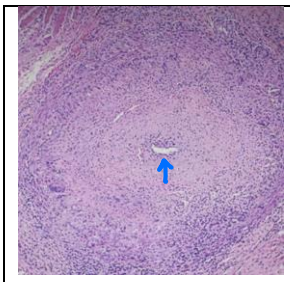
KAWASAKI	
 CA Aneurysm(s) ↓ ECG findings of MI in 4yr	 XTENSOR PURPURA / IgA mediated Vasculitis =

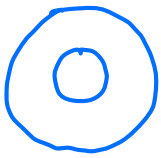
Rx: IVIG + Aspirin

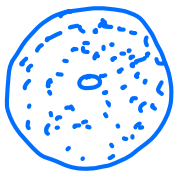
ANEURYSM(S) = Aspirin LIFE-long basis

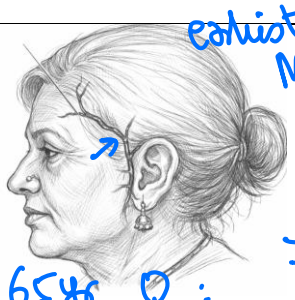
Giant cell arteritis

FEVER of unknown origin









earliest

M/C: F.U.O ↙ Unexplained FEVER > 3 wks

>65yr ♀ : Temporal headache fundus: normal

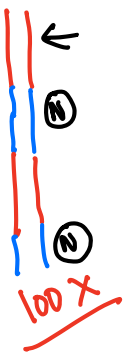
HPE features vessel

Skip lesions seen =

Granulomatous inflammation that involves the media and intima ✓ ✓

Multinucleated giant cells seen adjacent to the internal elastic lamina =

Fragmentation of internal elastic lamina ✓



S – Scalp tenderness = ischemia of skin of scalp

Auricular Temporal A: ischemia/narrowing

C – Claudication of jaw (jaw claudication) = ↑ = specific/characteristic

O – Old age (>50 years) =

CORD LIKE STRUCTURE at TMJ

P – Polymyalgia rheumatica association = Muscle, joint pain

E – ESR elevated * = 100 mm fall/1st HOUR

ESR ↑: 100 mm Hg: Multiple myeloma, IE, GCA

MOTT cell flame cell * [M.M – CRAB FEATURES
↳ Ca↑ Poly (n) SAP (n), ESR: low

- ***Start steroids before biopsy***

Clock face chromatin

- ***High-dose glucocorticoids are started as soon as GCA is suspected to prevent irreversible vision loss***

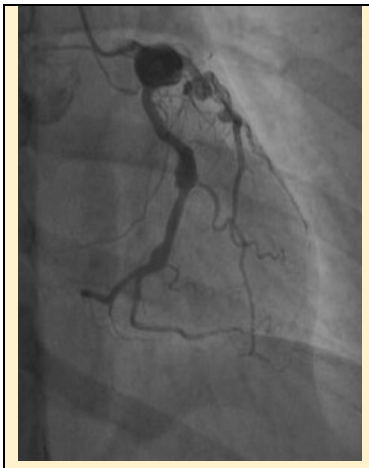
Ophthalmic A #

- **Major complication:**

  Irreversible blindness due to ischemic optic neuropathy

Kawasaki disease

Life-long aspirin if *large* coronary artery aneurysms are detected



Mnemonic:

Fever > 5 days plus

Conjunctivitis non purulent

Rash

Adenopathy Cxal: U/L

Strawberry tongue

Hand and feet skin desquamation

C R A S H

TOC IVIG ~~STEROIDS~~

amoxicillin

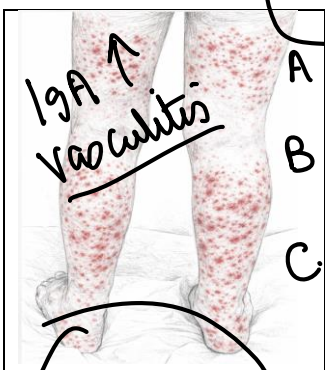
SCARLET FEVER

FEVER + RASH, PASTIA lines + STRAWBERRY tongue

desquamation: elbow jt

BIL Cxal LN ⊕

Henoch Scholein purpura



IgA ↑ vasculitis

EXTENSOR PURPURA

A Palpable purpura

B Abdominal pain and hematochezia (ileo-ileal intussusception)

C Arthralgia

Renal involvement (may occur)

SKIN + GIT + JTS

Work up:

C3 is normal and Ig A is elevated

Rx

Steroid given for renal and GI involvement with bleeding ✓ ✓

* MCC of Glomerulonephritis : IgA nephropathy

Additional Notes

* PSGN
  - L/M ⇒ HYPERCELLULAR GLOMERULUS
  - E/M ⇒ ELECTRON dense sub-epithelial humps
  - I/F ⇒ STARRY SKY

* IgA : E/M : mesangial cell proliferation nephropathy

* lupus nephritis ⇒ L/M = WIRE loop lesions
  E/M = sub-ENDOTHELIAL deposits
  I/F = FULL HOUSE effect

* Adult: foamy urine, 24 Hr urinary protein > 3.5gm
  Kidney Bx L/M =  SOLIDIFICATION of TUFT
  ? FSGS E/M = FOOT PROCESSES of Podocyte effacement

* Child, foamy urine: 24 Hr urinary protein > 3.5gm/day
  Minimal change disease L/M = NORMAL NIL LESION
  E/M = Foot process of Podocyte effacement

Additional Notes

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