RhAPP

RHEUMATOLOGY ADVANCED PRACTICE PROVIDERS

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RHEUMATOLOGY ADVANCED PRACTICE PROVIDERS

The Influence of Inflammation on Comorbidities

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Disclaimer

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Faculty Disclosure

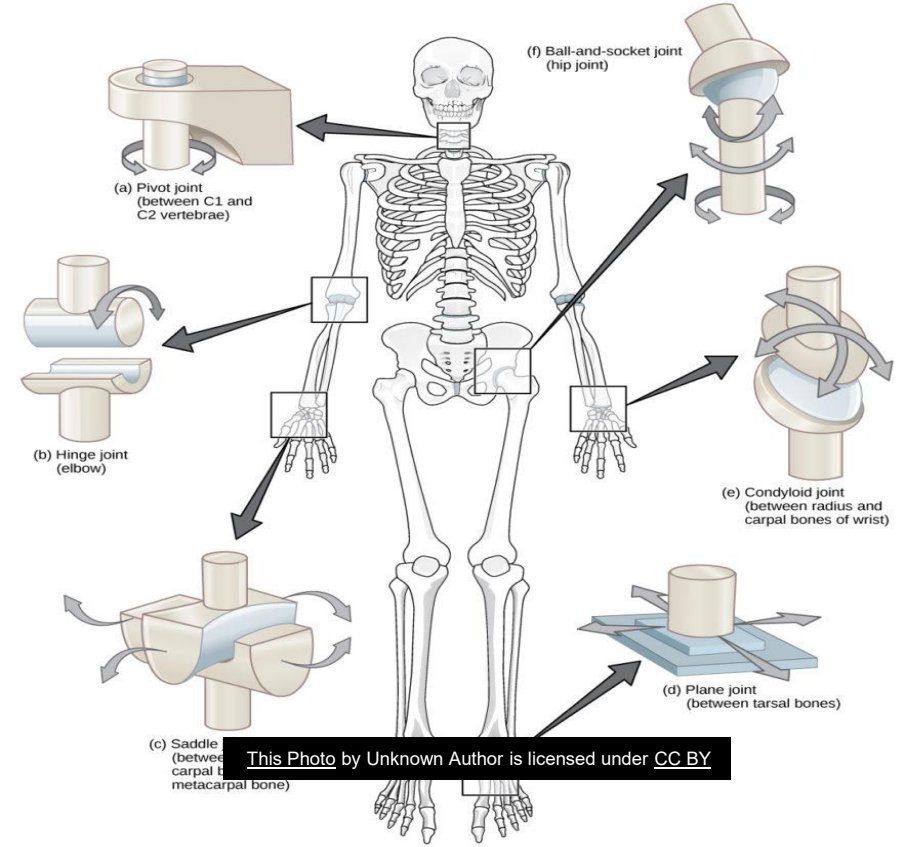
Kyle George, PA

- There are no relationships to disclose.

Jeanette Hart, PA-C

- Speaker: Abbvie, AstraZeneca, Sanofi Genzyme,

It’s Not Just The Joints

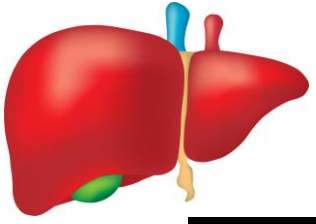


On average, RA patients have 1.6 comorbidities

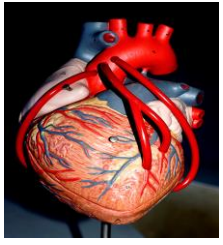
Systemic Manifestations of chronic inflammation

- Neuroendocrine/Neurophysiological

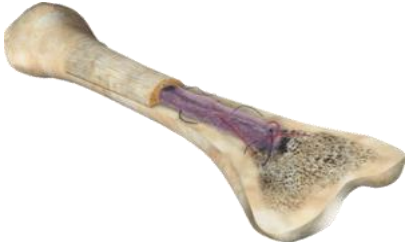
- Metabolic



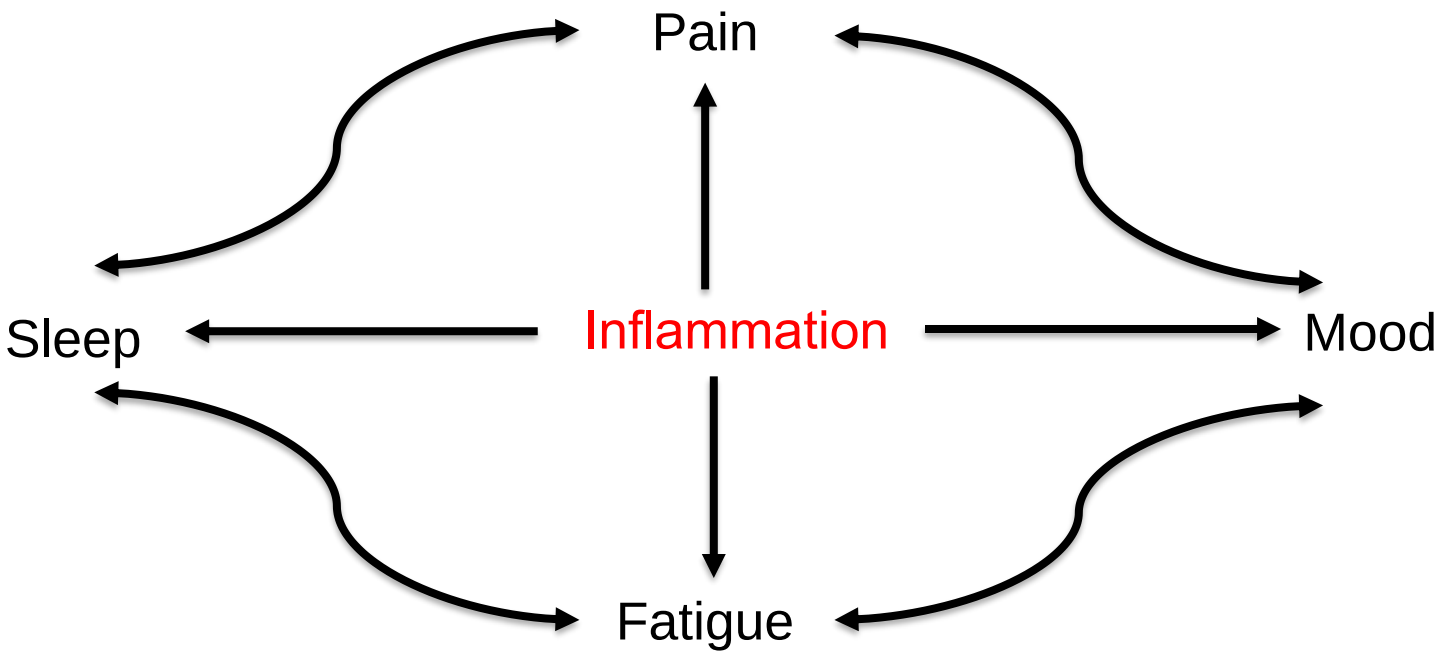
- Cardiovascular



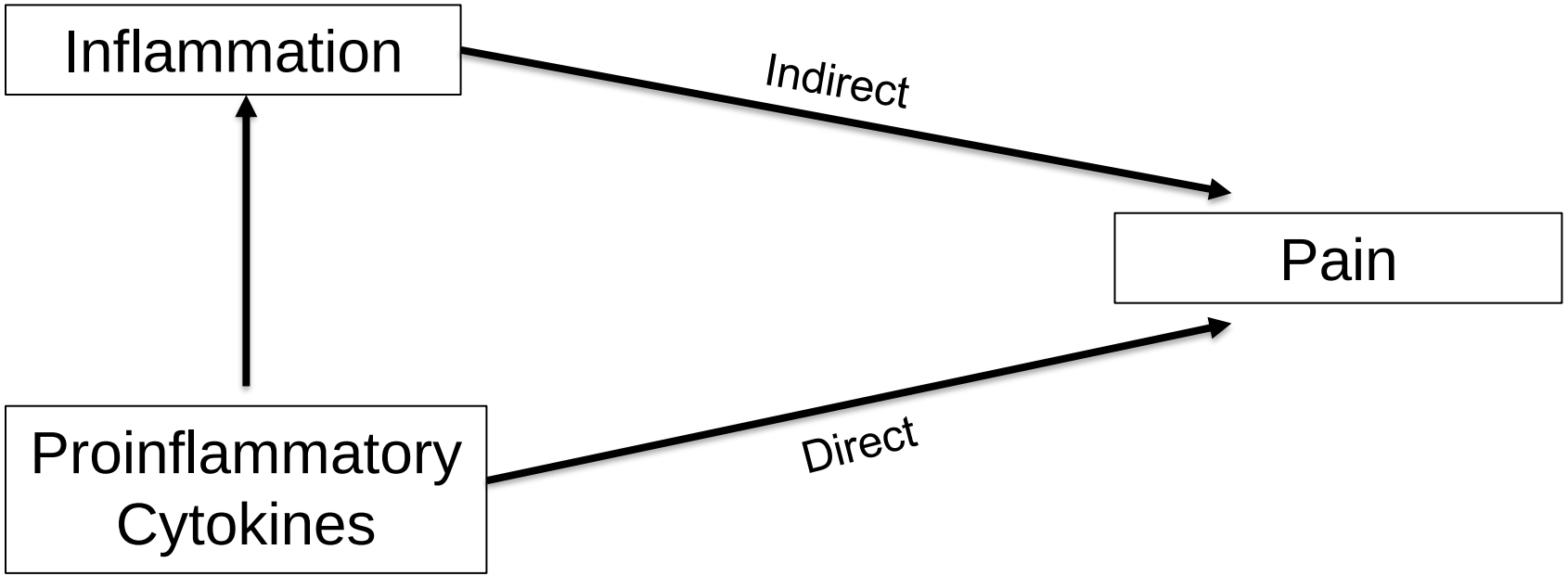
- Bone/Bone Marrow



Neuroendocrine



Neuroendocrine: Pain



Neuroendocrine: Fatigue

- Listen and Discuss = Control

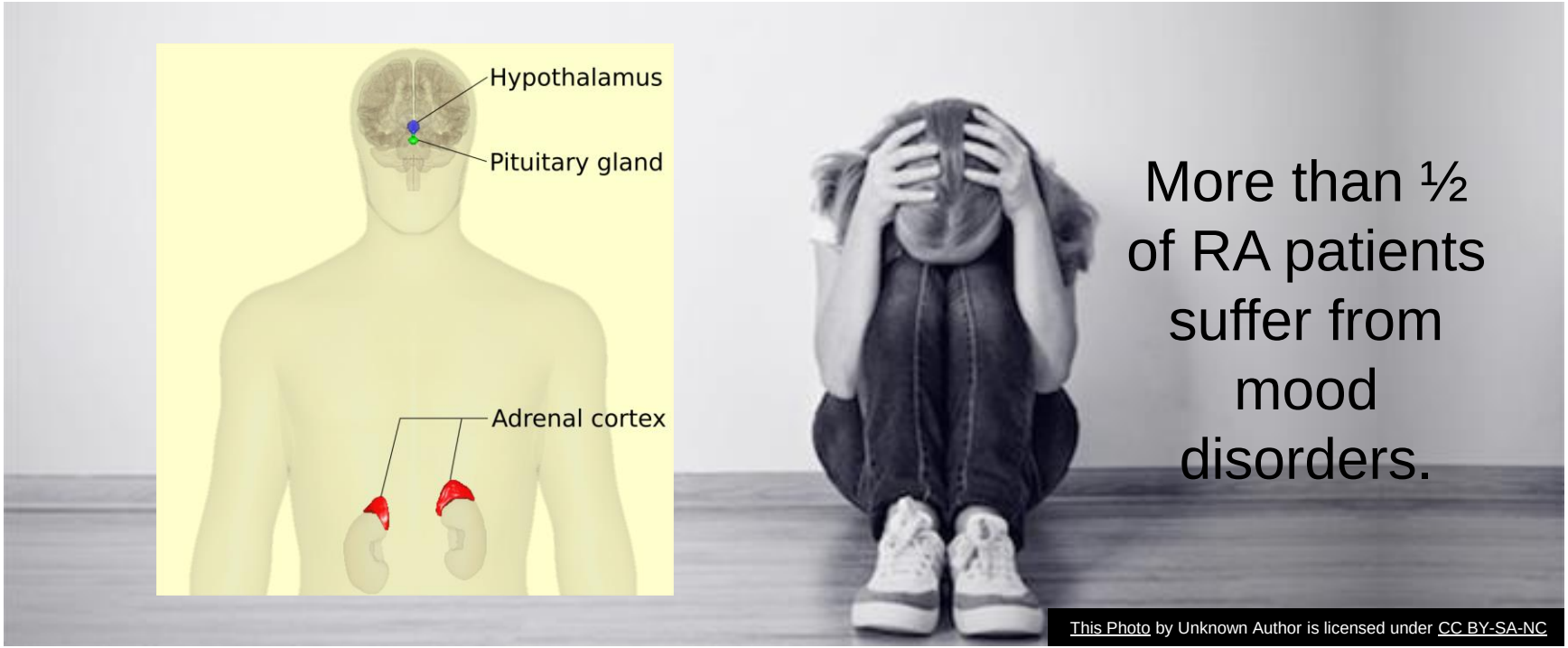
- Connected to mood sleep and pain

- Do not ignore comorbidities as cause

Neuroendocrine: Sleep

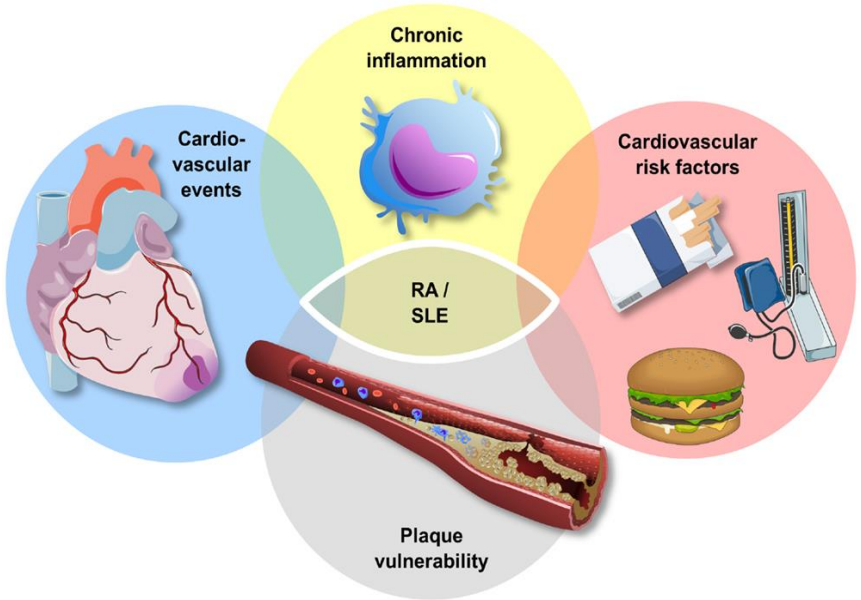
Sleep loss is linked to increased pain over interrupted sleep

Neuroendocrine: Mood



Cardiovascular

Systemic inflammation is an independent risk factor for cardiovascular disease.

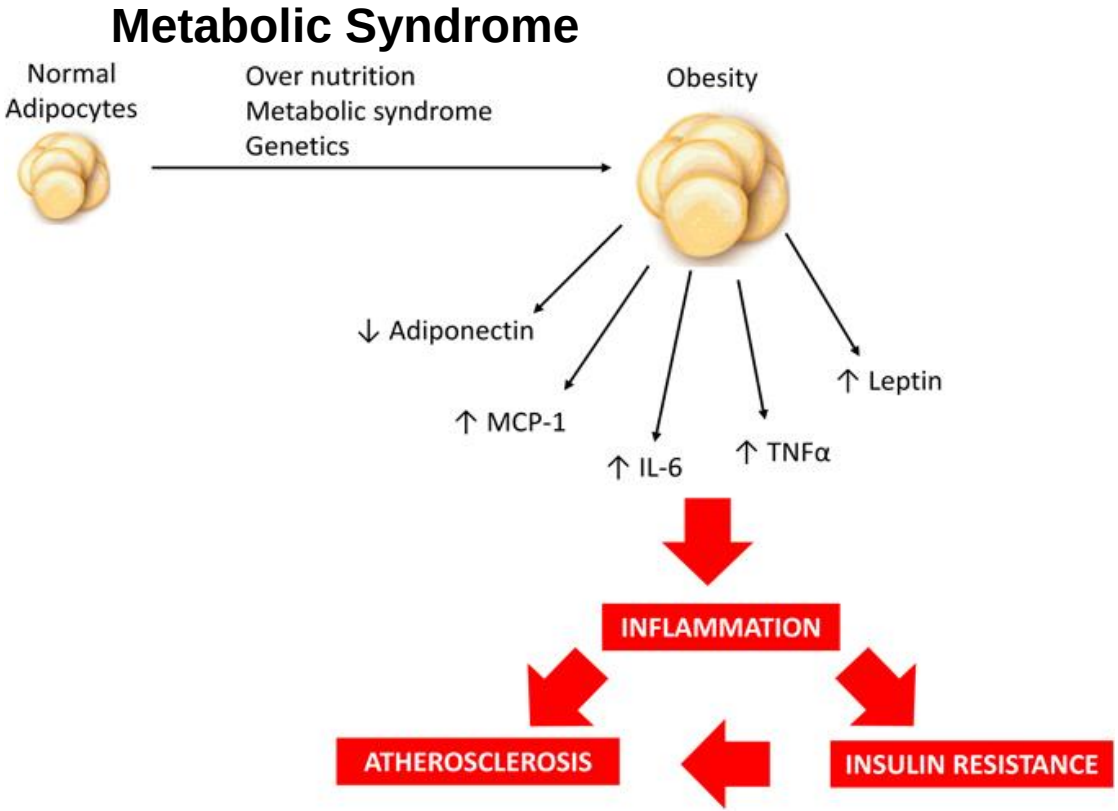


Lipid Oxidation

- ✓ Low serum lipid levels
- ✓ Oxidation of LDL
- ✓ Decreased protective capacity of HDL

- ✓ Decreased muscle
- ✓ Decrease subq fat
- ✓ Decreased BMI

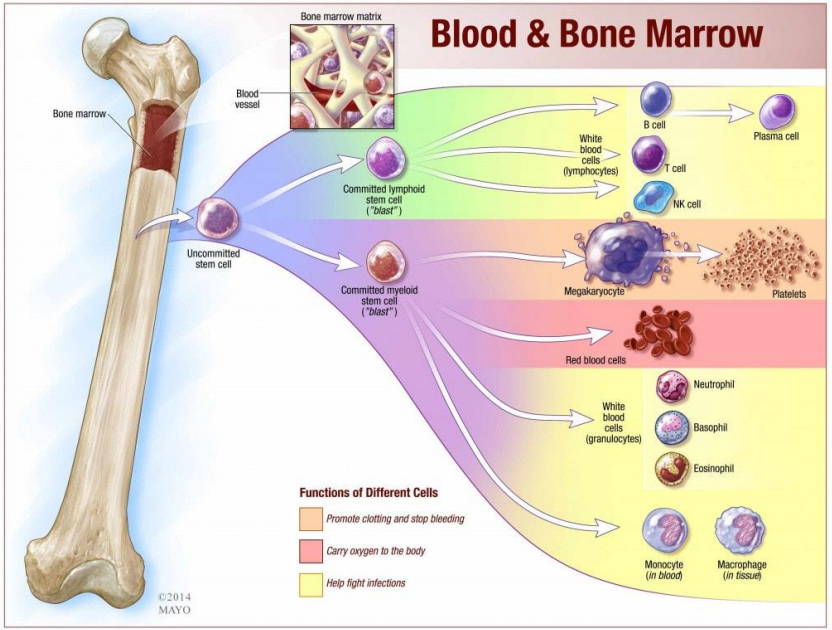
Metabolic



RA Cachexia

- Loss of skeletal muscle mass
- Increase in fat mass

Bone/ Bone Marrow



- Evaluate for anemia and its relation to fatigue, medications and disease
- Don’t forget about osteoporosis

Review

Neuroendocrine/Neurophysiological

- Pain, Sleep disorders and fatigue

Metabolic

- Dyslipidemia, metabolic syndrome or even DM2

Cardiovascular

- Endothelial dysfunction, hypercoagulability, arthrocentesis, CVD

Bone/Bone Marrow

- Anemia, bone resorption and osteoporosis

Infection as a comorbidity

- Choose a CDMARD with a shorter half life for patients with a history of serious infection.
- Hepatitis
  - “B” with natural immunity.
    - Monitor viral load for reactivation q 6-12 months
  - Active
    - Should be managed with Hepatologist or infectious disease
  - “C” with normal hepatic function can be managed normally but in conjunction with specialist
    - Avoid hepatotoxic drug initially

Infection as a comorbidity

- Tuberculosis
  - At least one month of TB therapy prior to initiating DMARD if treating latent TB
- Cocci
  - Use fluconazole if there is an active infection (AmB if serious) • Asymptomatic patients should be closely monitored
  - Serologic screening at initiation
  - Annual serologic screening has not been evaluated
  - *Resume Biologic or cDMARD* once the infection has improved
  - *Treat OCS the same as BRMs*
- Both: choose cDMARDs over biologics. Non-TNF >TNF.

Chronic inflammation and Malignancy

Malignancy

- Conventional DMARDs over Biologics and JAK inhibitors.
  - Non-Melanoma skin cancer: No contraindication to therapy escalation if needed but warrants routine skin cancer surveillance
  - Melanoma skin cancer: Abatacept avoided
  - Lymphoproliferative disorder – cDMARD, Rituximab
  - Solid Organ Malignancy – cDMARD > Rituximab > Other biologics. >5 years treated then treatment is no different than those without malignancy (excluding melanoma)*

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