

Blood Tests

Full Blood Count (FBC)	- Infection & haematological disorders e.g. anaemia
Erythrocyte Sedimentation Rate (ESR)	- With FBC + CRP, inflammatory/neoplastic/infectious process
Rheumatoid Factor (RF)	- Vague aching, symmetrical joint involvement +ve ESR + CRP
Anti-Cyclic Citrullinated Peptide (Anti-CCP)	- More specific than RF for RA, erosive disease
Serum Calcium	- Malignancy, Metabolic bone disease, renal disease/hypocalcaemia
Serum Inorganic Phosphorus	- Metastatic bone disease, metabolic bone disease, renal disease
Parathyroid Hormone (PTH)	- Metabolic bone disease/metastatic bone tumours - PTH + Serum Calcium + Phosphorus
Serum Total Protein & Albumin	- When ESR/CRP is elevated, FBC reveals dyscrasias/malignancy - multiple myeloma
Serum Alkaline Phosphatase	- Primary/metastatic tumours, osteomalacia, Paget's/hepatobiliary disease
Serum Prostatic Acid Phosphatase (PAP)	- Mets of Prostate Cancer
Serum Uric Acid	- Suspicion of Gout
Anti-Nuclear Antibody	- Inflammatory process - SLE (Fatigue, Arthralgia, Malar Rash, photophobia, alopecia), autoimmune disease, some malignancies
HLA-B27	- Insidious LBP - AS, Reiter's syndrome + psoriatic Arthritis
Serum urea and creatine	- LBP + suspicion of renal disease (pyelonephritis, glomerulonephritis and renal calculi)
Serum total protein and albumin	- When ESR/CRP is elevated - malignancy/multiple myeloma (drops albumin/globulin rate to >1.0)
Total Bilirubin:	- Pain in mid back/right upper back - Gallbladder gallstones, tumour, inflammation, Liver problems
Serum Creatine Kinase (CK)	- Elevated in the absence of heart disease = soft tissue diseases - polymyositis & dermatomyositis
Suspected Inflammatory arthritis	- FBC, ESR/CRP, RF/Anti-CCP, ANA
Monoarticular pain:	- As above + Serum urate + X-rays (OA)
Myalgia + polymyalgia	- FBC, ESR/CRP/RF/ANA/Thyroid screen/CK
Connective tissue disorders:	- RF and ANA



Urinalysis

- Hx/signs of a UTI
- Hx/signs of renal disease
- Hx/signs of DM
- Hx of proteinuria, Bacteriuria, pyuria, microhaematuria

Electrodiagnostic Studies (EMG)

- Muscles + neuromuscular Junction disorders
- How well nerves can transmit electrical signals

X-ray

- Females should follow the 10 day rule (incase of pregnancy)
- When to x-ray:
 - >50 yos
 - Significant trauma
 - Neuromotor deficits
 - Unexplained weight loss
 - Suspicion of AS
 - Drug or alcohol abuse
 - Hx of cancer
 - use of corticosteroids
 - Increased temp >37.8C
 - Failure to improve
 - Patient seeking compensation
 - Scoliosis
 - Hx of surgery in region
 - Inconsistent/equivocal biomechanical spinal exam findings
 - Evaluation of complex postural/biomechanical disorders
 - Limited Exam due to pain

