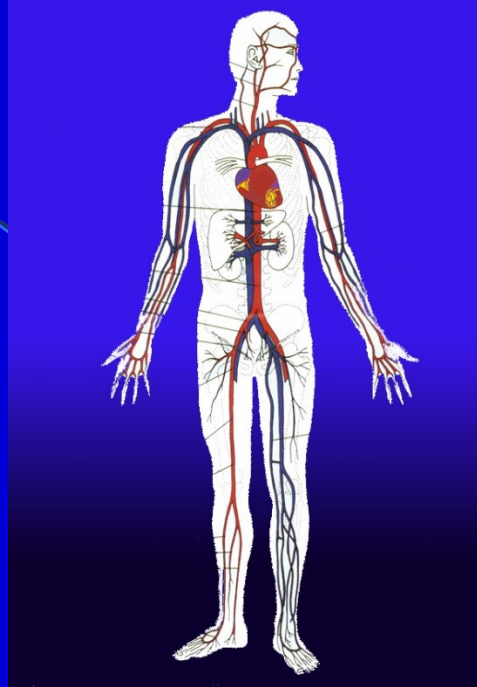


DIFFERENTIAL DIAGNOSIS



the lower limb pain

Differential diagnosis is an ability of ALL physicians



The specific treatment of the particular disease is the ability a physician with the particular speciality



The principle of DD is reverse to learning

Learning – starts with organ systems and gets deeper into different pathologies with different symptoms

DD – starts at a symptom and tries to find its origin – the disease



The Leading Symptom vs Accompanying symptoms

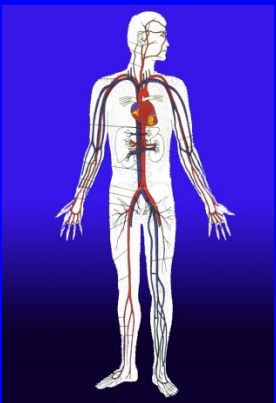
e.g.

PAIN

Vs.

Local – mobility, neural disorder, skin colour and temperature, gathering

Distant – fever, headache, back pain...



Exclude life threatening conditions

Critical ischaemia

Deep venous thrombosis

Syndrome of cauda



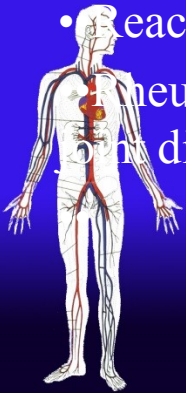
Possible diseases

- Achilles tendinitis
- Achilles tendon rupture
- ACL injury (tearing of the anterior cruciate ligament in your knee)
- Ankylosing spondylitis
- Baker's cyst
- Bone cancer
- Broken leg
- Bursitis (joint inflammation)
- Chronic exertional compartment syndrome
- Claudication
- Deep vein thrombosis (DVT)
- Gout (arthritis related to excess uric acid)
- Growing pains
- Growth plate fractures
- Hamstring injury
- Herniated disk
- Infection
- Juvenile idiopathic arthritis (formerly known as juvenile rheumatoid arthritis)
- Knee bursitis (inflammation of fluid-filled sacs in the knee joint)
- Legg-Calve-Perthes disease
- Meralgia paresthetica
- Muscle cramp
- Muscle strain
- Night leg cramps
- Osgood-Schlatter disease
- Osteoarthritis (disease causing the breakdown of joints)



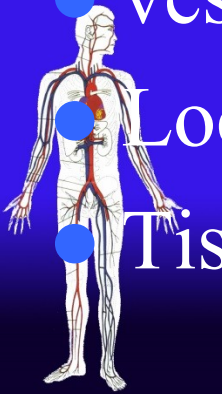
Possible diseases

- Osteochondritis dissecans
- Osteomyelitis (a bone infection)
- Paget's disease of bone
- Patellar tendinitis
- Patellofemoral pain syndrome
- Peripheral artery disease
- Peripheral neuropathy
- Posterior cruciate ligament injury
- Pseudogout
- Psoriatic arthritis
- Reactive arthritis
- Rheumatoid arthritis (inflammatory joint disease)
- Sacroiliitis
- Sciatica
- Septic arthritis
- Shin splints
- Spinal stenosis
- Sprains
- Stress fractures
- Tendinitis
- Thrombophlebitis (a blood clot that usually occurs in the leg)
- Torn meniscus
- Varicose veins



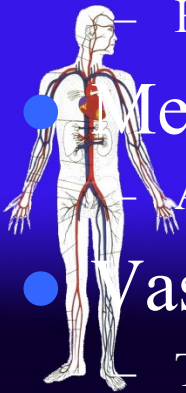
The problem arises from CNS to very periphery

- Brain
- Medulla
- Spine
- Peripheral nerves
- vessels
- Locomotory apparatus
- Tissues



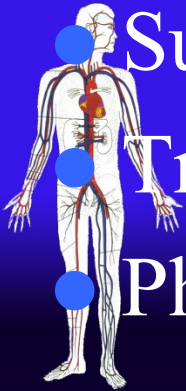
Origin

- **Locomotory app.**
 - Trauma, Inflammation,
- **CNS**
 - Tumours, neuralgias
- **Peripheral nerves**
 - Radicular et related. syndromes
- **Tissues**
 - Ischaemia, infection,
- **Cardiac**
 - Heart failure with depressed Card.Output
- **Metabolic**
 - Acidaemia, Ca, PTH,
- **Vascular**
 - Thrombosis, embolia, stenosis



Specialist involved

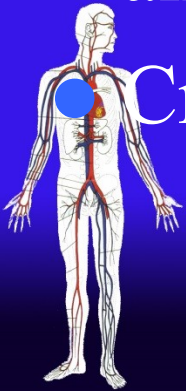
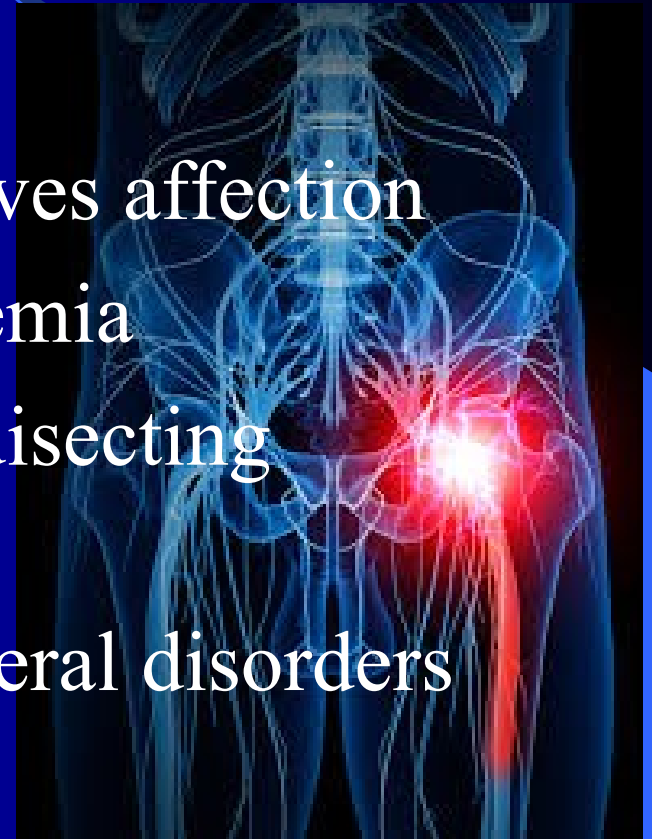
- Psychiatrist
- Neurologist
- Rheumatologist
- Angiologist
- Orthopedist
- Surgeon
- Traumatologist
- Physiotherapist



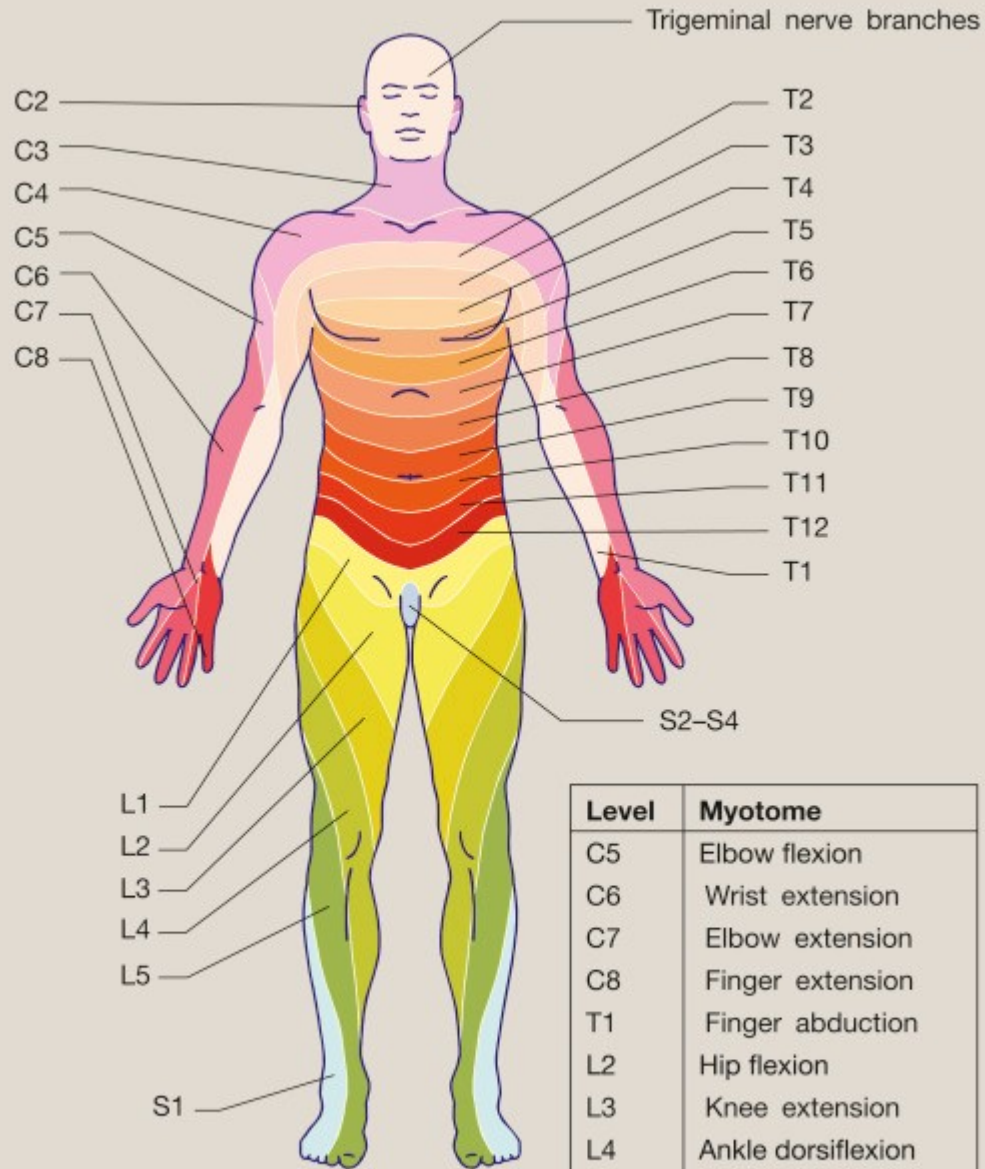
The leading symptom - pain

- Sharp and hot - neuropathic
- Well localised – somatic nerves affection
- Blunt – inflammation, ischaemia
- Pulsating – inflammation, dissecting aneurysm

Cramps – hormonal and mineral disorders

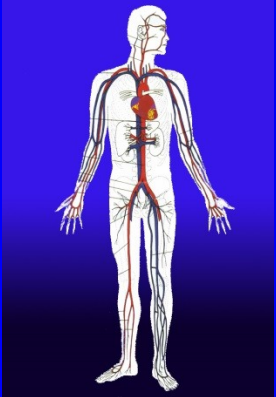


Myotomal distribution of root symptoms



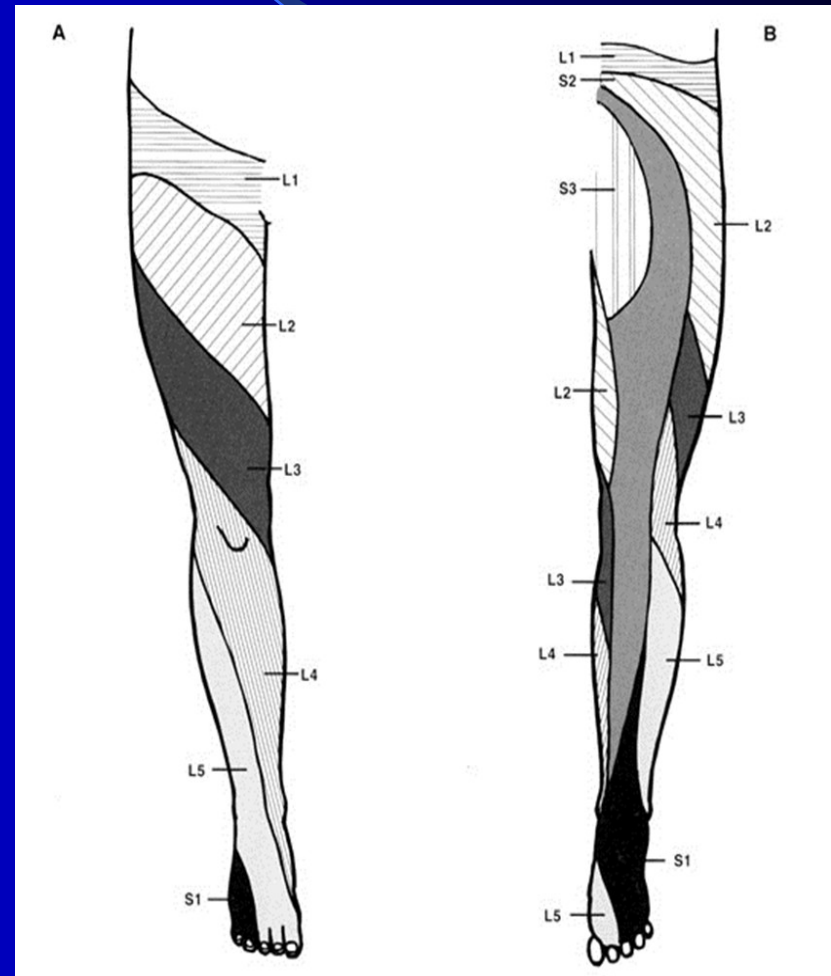
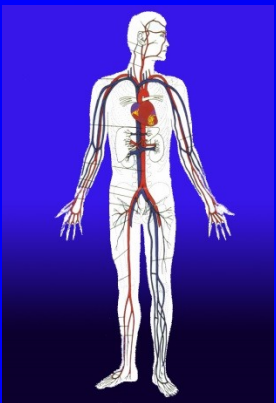
Level	Myotome
C5	Elbow flexion
C6	Wrist extension
C7	Elbow extension
C8	Finger extension
T1	Finger abduction
L2	Hip flexion
L3	Knee extension
L4	Ankle dorsiflexion
L5	Great toe extension
S1	Ankle plantar flexion

● In re



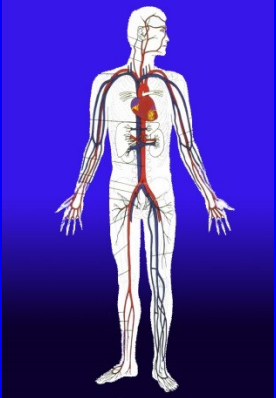
Irradiation

- Within neurodermatoma
- Along artery



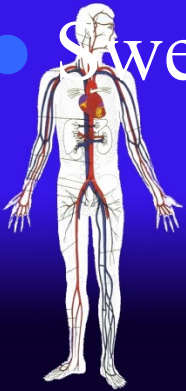
Duration and time pattern

- All the time
- Upon strain
- In rest only
- After some period of walking



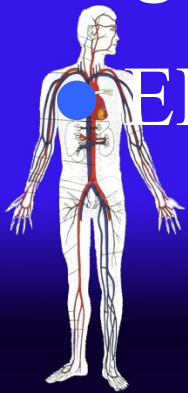
Accompanying symptoms

- Skin discoloration – paleness,
- Hypaesthesia/anaesthesia/paraesthesia
- Back pain – neuropathic
- Fever
- Swelling



Examination methods

- Anamnesis
- Physical examination
- Blood chemistry and count
- Imaging methods – X-ray, US, CT, MRI, ...

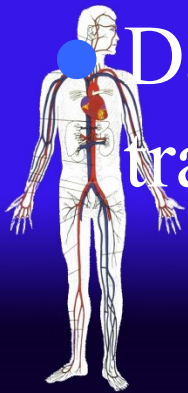


EMG



Anamnesis

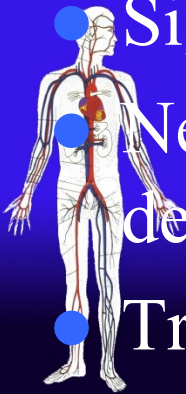
- Both family and personal
- Thrombosis, embolisation, Atrial fibrillation, Horminal contraception, thrombophilia, Tobacco abuse (passive too)...



Daily routines, occupational anamnesis, trauma

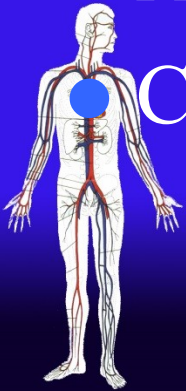
Physical examination

- Colour
- Temperature
- Swelling
- Joint pain, extent of movements, fluctuation, balottement
- Pulsations
- Signs of DVT
- Neurologic tests – Lassegue, irritation or depreciation
- Treadmill test



Blood chemistry

- DD, LD, myoglobine
- CRP, Leu, ASLO, CIK, ANA
- Uric acid
- ABR, Ca, Mg.
Calcitonine, Parathormon



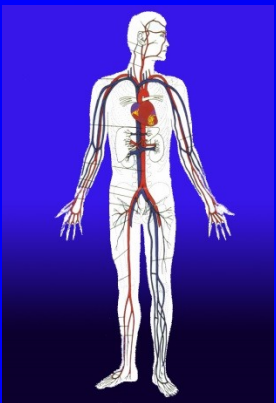
Imaging methods

- US
- CTA_g
- MRI



Neurologic tests

- EMG



Break or finish 😊 😊 😊

