### Hip case presentation

Dr Ankush Kundu PGIMS Rohtak



## Chief complaints

- Sandeep, 21/M, Labourer, Hindu
- c/o:
- Pain right groin region \* 1 year
- Limp \* 1 year



#### Pain

- Patient was apparently well 1 year back when he started experiencing pain in right groin region
- Insidious in onset
- Gradually progressive
- Dull aching in nature
- Non radiating
- Patient had to sleep with knee and hip in flexion and after 1-2 hours he awakens with change in positioning and patient again had to sleep in same position
- Present with 1st step
- Aggravates while walking and strenous work
- At onset, it was relieved by medications but now not relieved by medications.
- Relieved on rest
- Pain is associated with limitation of movements and activities of daily living.



### Limp

- Patient himself noticed limp 1 year back
- Insidious in onset
- Progressive in nature
- Associated with pain
- Started with 1<sup>st</sup> step
- Initially patient was able to walk upto 1km in a stretch but now patient is restricted to about 600-700m, after which he have to take rest for relief
- Patient is not using any assistance or support while walking
- Not able to squat and sit cross leg.



- History of weight loss of about 5-6 kg in last year.
- No h/o trauma
- No h/o fever, night sweats, evening rise of temperature
- No h/o morning stiffness or any other join t involvement
- No h/o bleeding gums, bleeding diasthesis



### Past history

- There is h/o protein powder intake for 1 month before the onset of pain 1 year back
- h/o intake of ayurvedic medications for 3 months after the onset of pain
- No h/o TB, DM, HTN, seizure, respiratory, dermatological or endocrinological disesase.



## Personal history

- Occasional drinker 250 ml once a biweekly.
- Non smoker
- Non vegetarian
- Normal bowel bladder habbits



#### **GPE**

- Patient is calm, concious, well oriented to T/P/P
- Vitals- stable
- Average built
- PICCLED –ve
- Normal IQ
- Arm span normal
- No ligament laxity



### Systemic examination

- CNS NAD
- CVS normal S1 S2 heard, no murmur heard
- RS normal breath sounds present, normal chest expansion
- PA NAD



### Local examination of bilateral hips

- I examined my patient after explaining the procedure and taking consent, under appropriate exposure and lightening in standing, sitting and lying down position.
- On standing : from front
- Head in midline
- Bilateral shoulder at equal level
- Bilateral nipples at equal level
- Right ASIS is at lower level than left side.
- Bilateral patella facing forward
- No equinus
- No swelling, scar, sinus in scarpa's triangle



- From side:
- Normal lumbar lordosis
- Abdomen protrusion : normal
- No kyphosis



- From back :
- No spinal deformity
- Right PSIS is at lower level than left side
- Wasting of bulk of gluteal muscles
- No swelling, scar, sinus seen.



## On lying down

- Right ASIS is at lower level than left side.
- Wasting present of right thigh
- Bilateral patella facing upward and slightly ER
- Left lower limb more ER than left side.
- No swelling, scar, sinus in scarpa's triangle.
- No abnormal GT protrubrence



### **Palpation**

- I will confirm my inspection findings on palpation
- Local temperature bilateral normal (comparable)
- Tenderness present at anterior hip point.
- GT smooth, non tender
- Normal contour
- No broadening
- Bilateral GT compression tenderness present
- No enlarged lymph nodes palpable

- Thomas test 10 degrees fixed flexion deformity
- Abduction deformity 15 degrees
- ER deformity 20 degrees











#### Measurements

- Apparent length: 1cm apparent lengthening on right side.
- True length: 1cm true shortening over right side
- Segmental lengthening: right femur 1 cm shorter than left side. Bilateral tibia same length.
- 2.5cm wasting on right side thigh.



#### With knee extended

- Left hip flexion with knee extended was 80 degrees whereas left hip flexion with knee extended was 50 degrees
- Left hip abduction was 40 degrees
- Right side hip: abduction deformity of 15 degree with further flexion possible till 30 degree
- Left hip adduction 30
- Right side not possible
- Left hip extension :
- Right side not possible
- ER: Left side 70, right side 60 degree
- IR: Left side 35, right side not possible



### With knee flexion

	Left	right
Abduction	40	30
Adduction	20	-
ER	20	30
IR	30	10
Extension	10	-



### Special tests

- Bryants triangle: after squaring of pelvis
- Supratrochnateric shortening of 1 cm
- Shoemakers line
- Right line meets opposite to midline and below umblicus
- Nelations line: line connecting right ischial tuberosity and right ASIS – supratrochanteric shortening
- Chiene's test lines converging on right side
- Craig's test 15 degree femoral anteversion
- Telescopy test –ve







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- SI Joint: normal
- Bilateral knee ROM normal
- No DNVD



### Gait



### Diagnosis

 21/m with arthritic right hip with 10 degree fixed flexion deformity, 15 degree abduction deformity with 20 degree external rotation deformity with 1cm true shortening secondary due to TB with no DNVD.



### D/D

- AVN
- Inflammatory pathologies like AS, RA



### Management

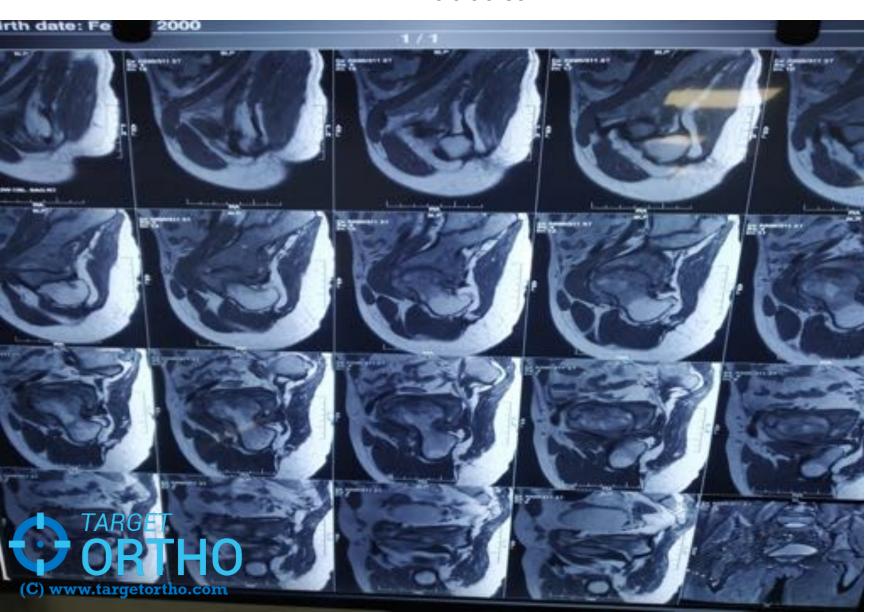
- Hematological
- Ch- Hb 10gm TLC 7400 DLC- 70,20
- Esr 52
- Crp 160
- Sputum for AFB -ve
- Radiological
- Xray PBH AP, right hip frog leg view.
- CXR PA
- MRI



# X-ray



## MRI





#### **Treatment**

- 3 options
- 1- painless, stable hip at the cost of limitation of movement – Arthrodesis
- 2- painless, mobile hip but with instability and limb length discrepancy – girdlestone
- 3- painless, mobile, stable hip but with variable longevity of prosthesis

