

# **CASE B/L KNEE TKA IN A PATIENT WITH SEVERE OA**

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- 70y/m with c/o pain and deformity left more than right of bilateral knee since 2 years back.
- No h/o fall/trauma







right

left



# Clinical Examination

- Diffuse swelling over bilateral knees
- Varus deformity noted of bilateral knee
- Diffuse joint line tenderness more over the medial joint-line
- Crepitus felt during knee flexion



# CLINICAL EXAMINATION

- Knee flexion 40 degrees on the left and 60 degrees on the right
- Intercondylar distance 18 cm
- Knee fixed flexion deformity 15 degrees on right and 20 degrees on the left knee
- Shortening of 2cm noted over the left side
- Gait?





# KELLOGREN LAWRENCE CLASSIFICATION



Classification	Normal	Doubtful	Mild	Moderate	Severe
Description	No feature of OA	Minute osteophyte, doubtful significance	Definite osteophyte, normal joint space	Moderate joint space reduction	Joint space greatly reduced, subchondral sclerosis

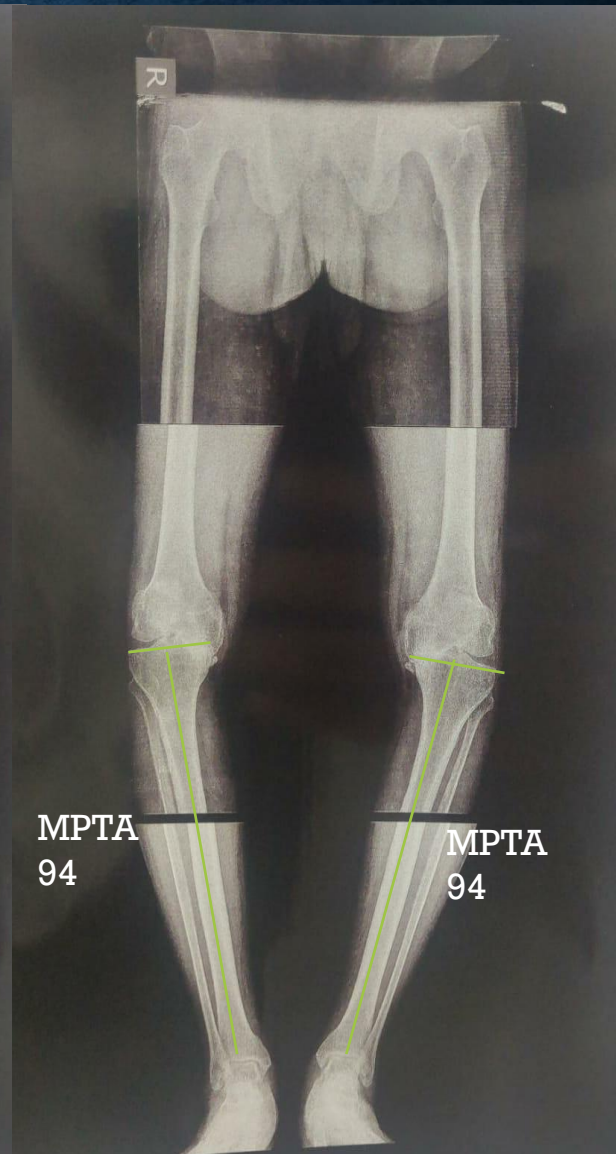
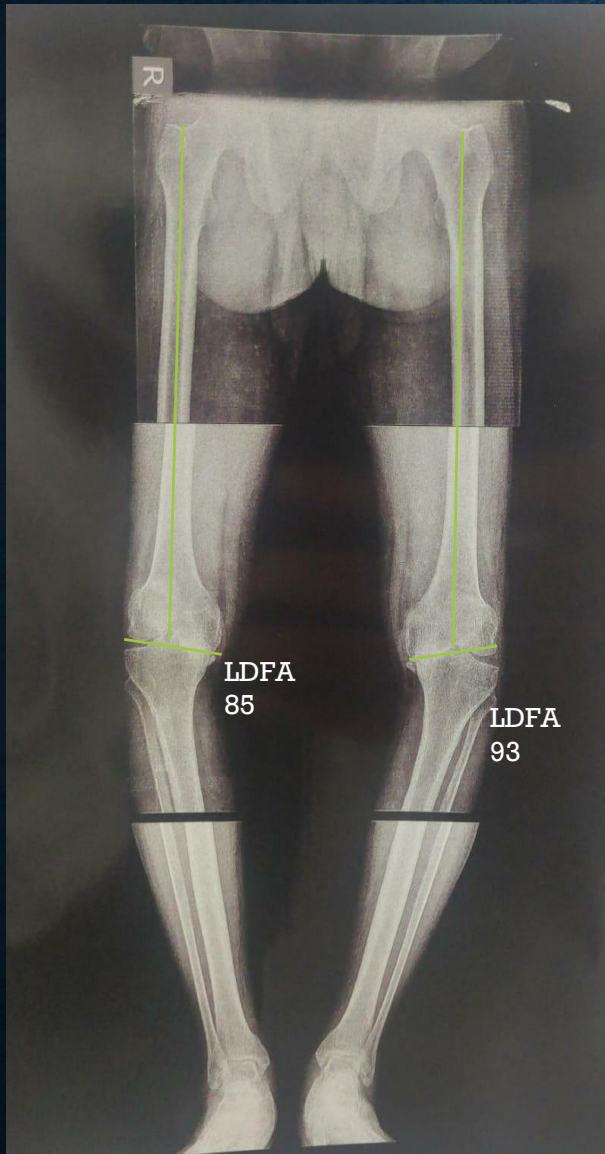


# X-RAY FINDINGS

- Reduced joint space with medial joint space collapse
- Severe subchondral sclerosis
- Multiple osteophytes
- Multiple chondral cysts
- Changes suggestive of grade IV osteoarthritis bilaterally







# MANAGEMENT

- Staged procedure for total knee arthroplasty was planned keeping in mind the age of the patient and associated comorbidities
- Posterior stabilizing prosthesis was used
- First surgery was done on



# TOTAL KNEE ARTHROPLASTY

- GOALS:

1. Good stability
2. Alignment
3. Good fixation
4. Near normal functional kinematic

- To achieve this one has to focus on:

1. Restoration of the mechanical axis
2. Restoration of the joint line
3. Soft tissue balancing
4. Equalizing the flexion and extension gaps
5. Restoring the patelo-femoral alignment and mechanics

# PROCEDURE

- In total knee arthroplasty following cuts are taken
  1. Distal femoral
  2. Posterior femur condyle
  3. Proximal tibial cut
  4. Notch cut
  5. Patella cut



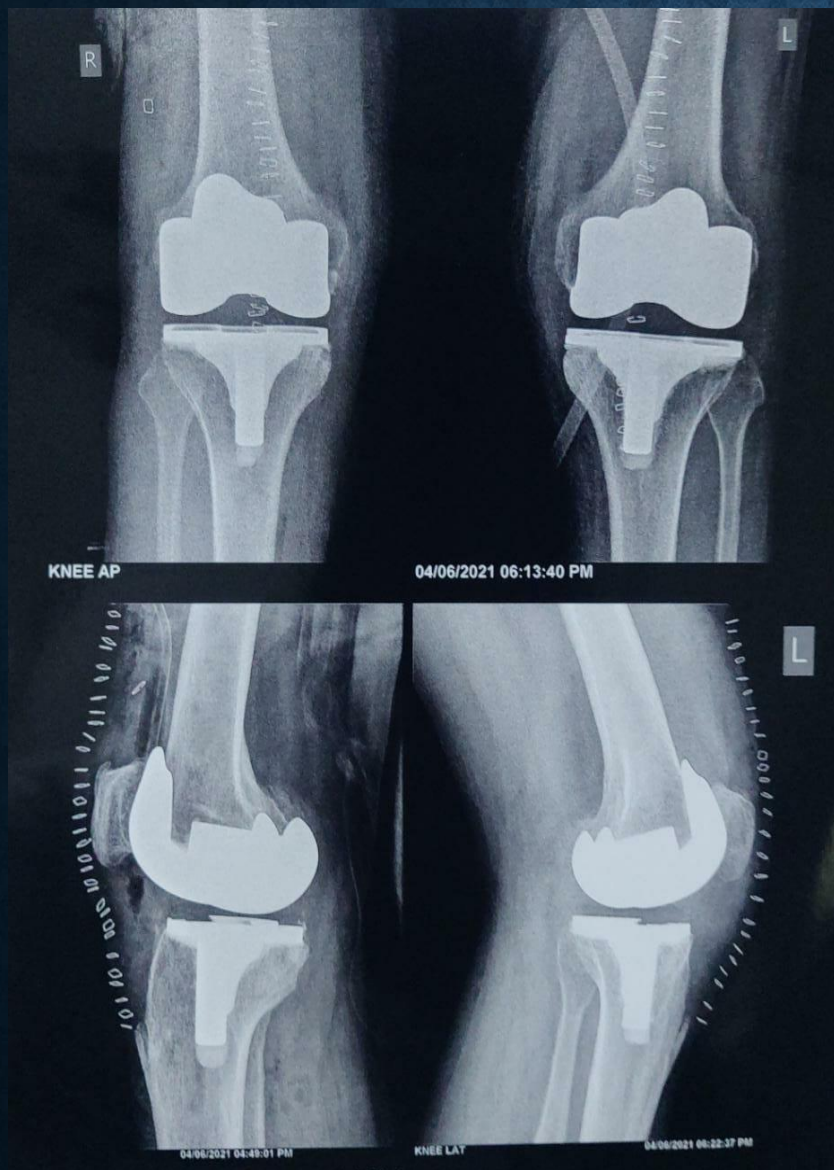


- Tibial component

1. No overhang
2. Slight valgus
3. Tibial slope recreated

- Femoral component

1. Posterior stabilization component
2. No anterior notching
3. Medial and lateral gaps balanced
4. Mechanical and anatomical axis restored







KINEMASTER