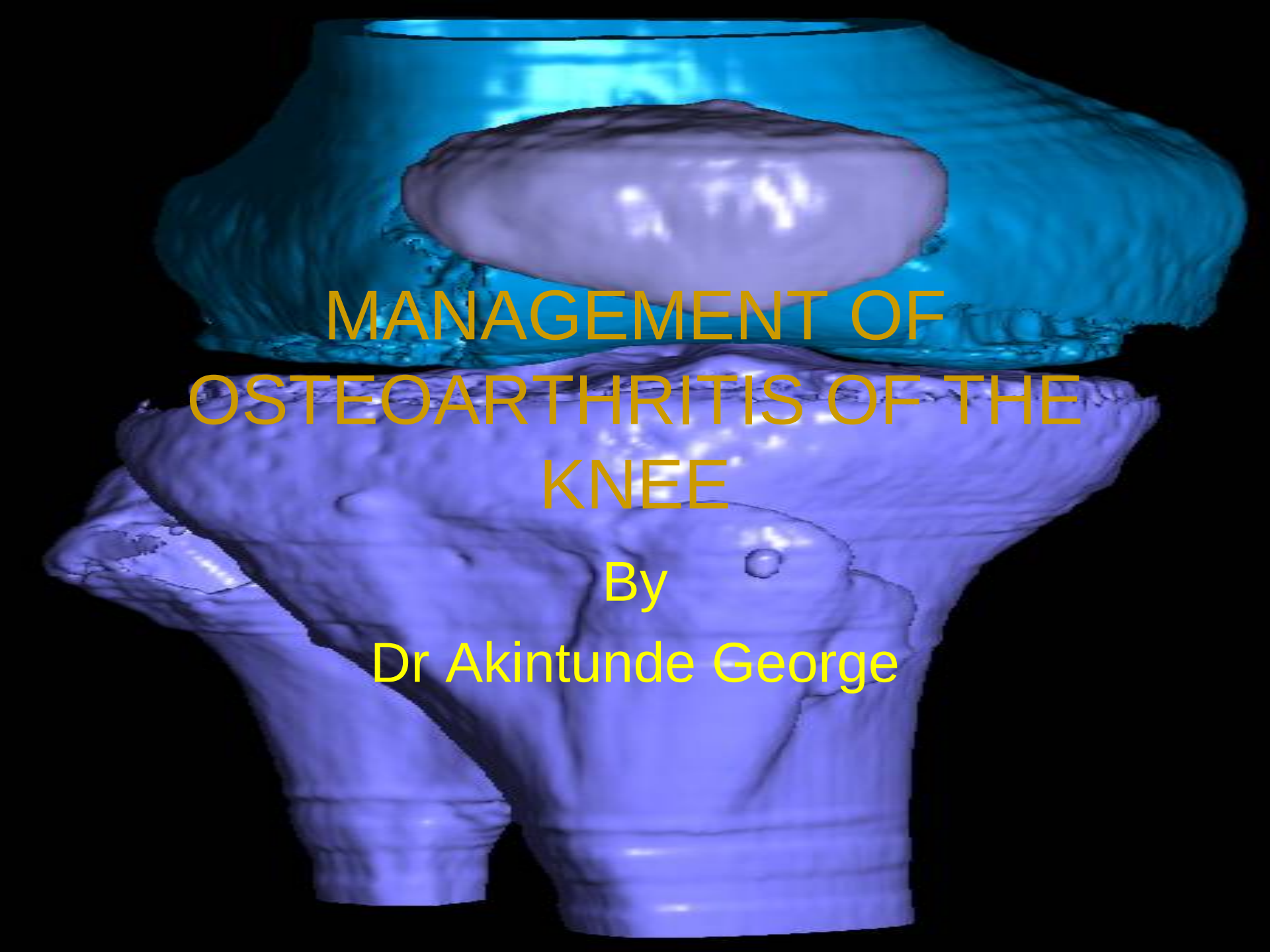
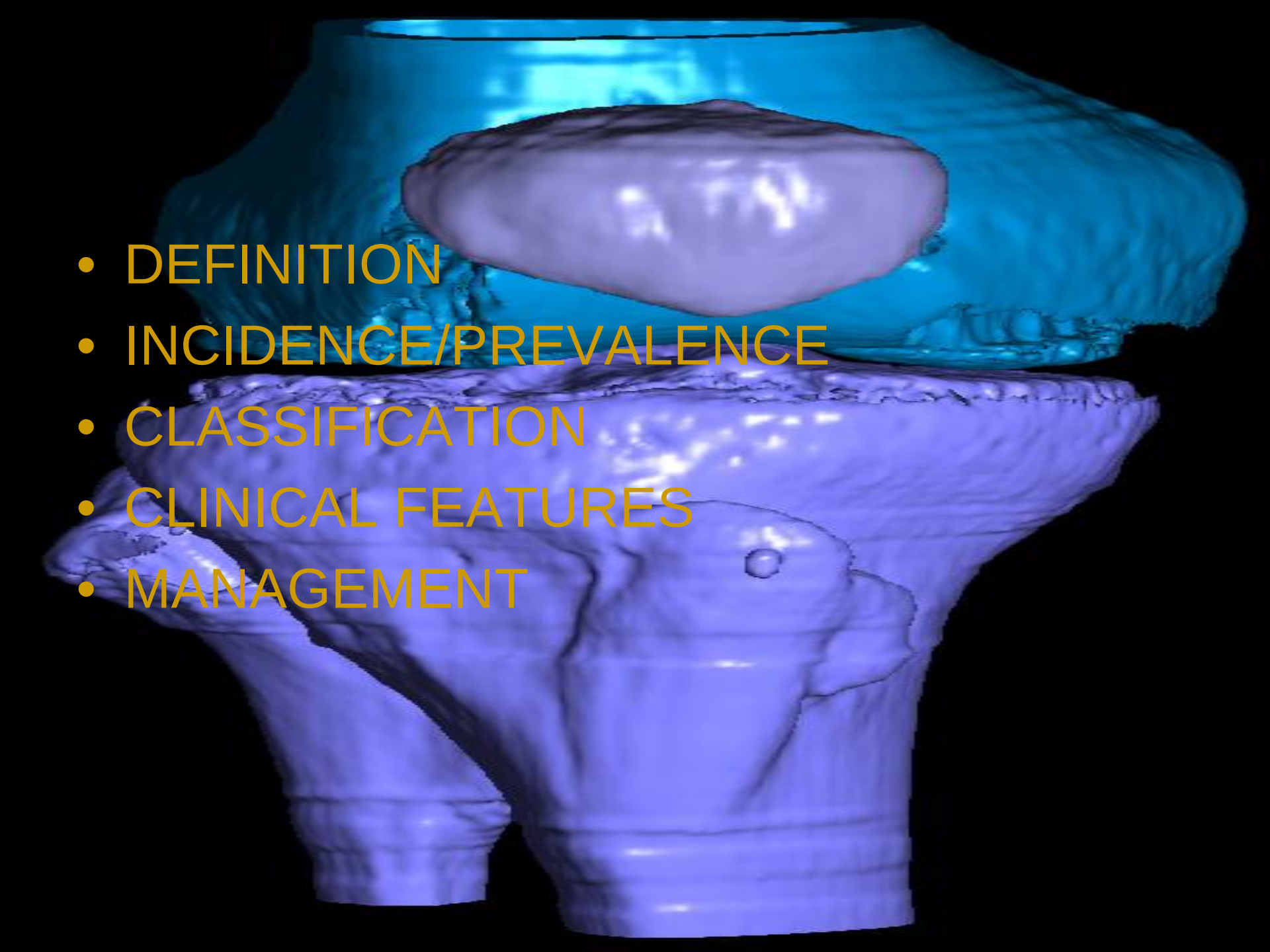


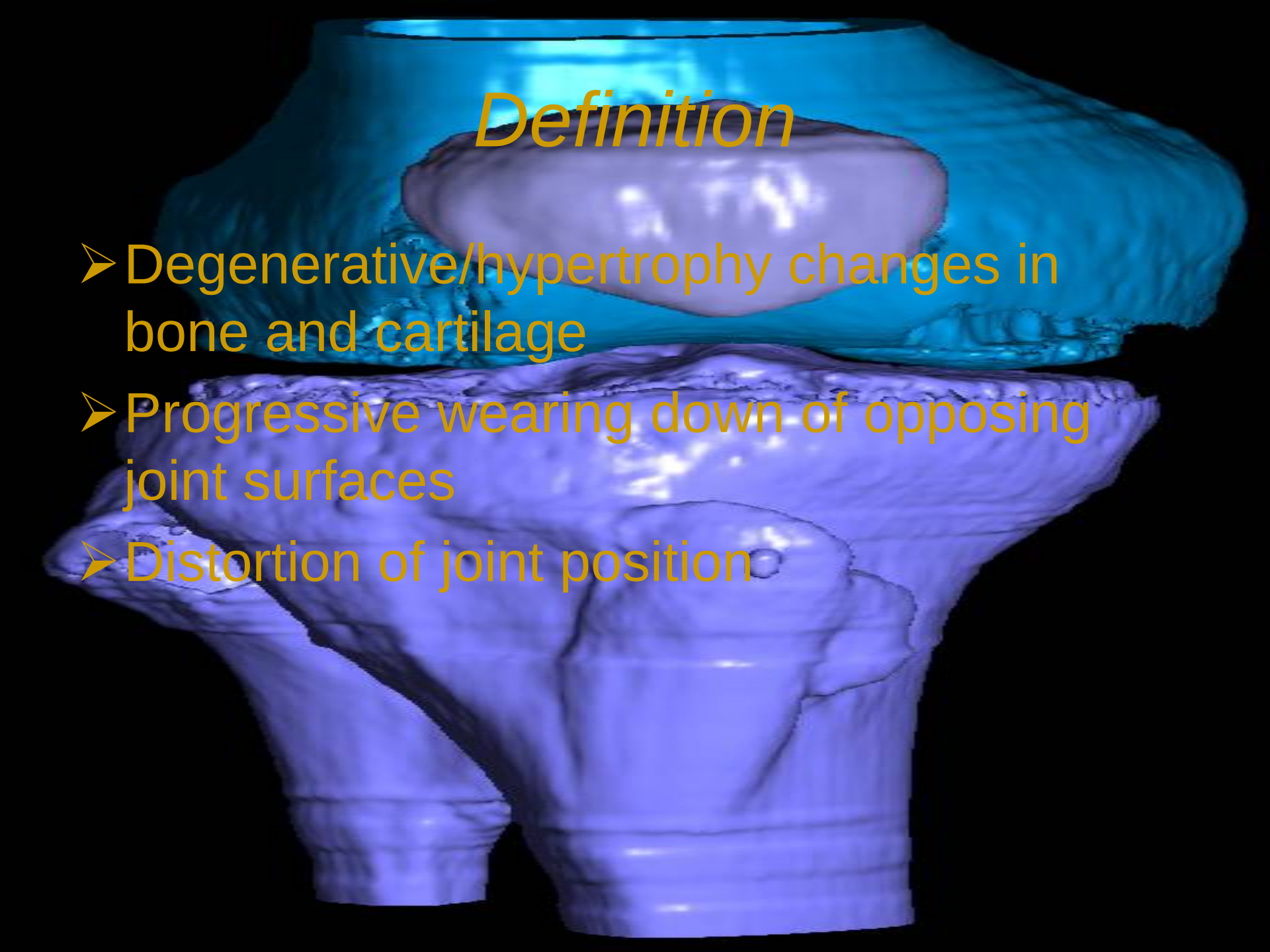
MANAGEMENT OF OSTEOARTHRITIS OF THE KNEE

By

Dr Akintunde George



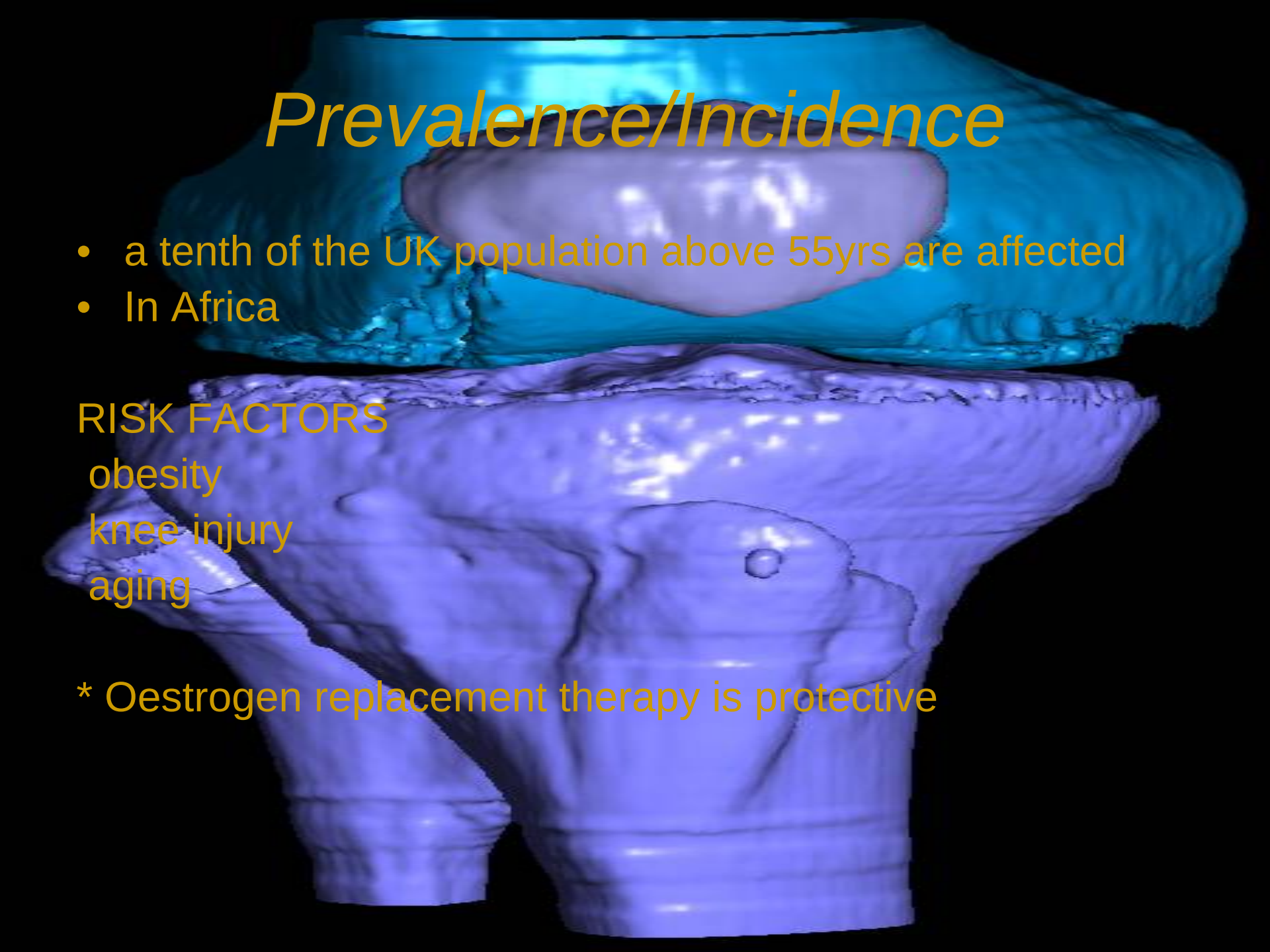
- DEFINITION
- INCIDENCE/PREVALENCE
- CLASSIFICATION
- CLINICAL FEATURES
- MANAGEMENT



Definition

- Degenerative/hypertrophy changes in bone and cartilage
- Progressive wearing down of opposing joint surfaces
- Distortion of joint position

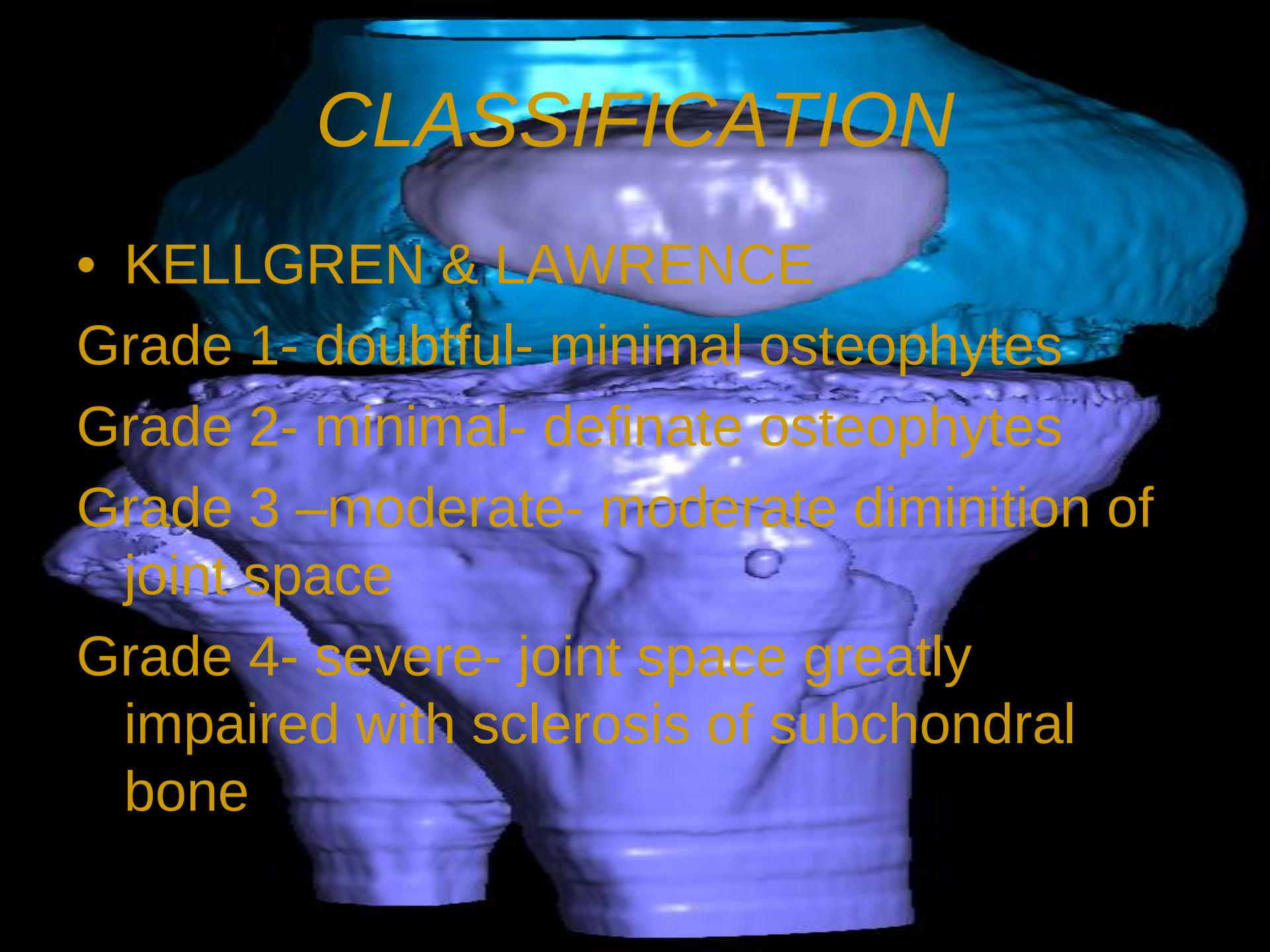
Prevalence/Incidence



- a tenth of the UK population above 55yrs are affected
- In Africa

RISK FACTORS
obesity
knee injury
aging

* Oestrogen replacement therapy is protective



CLASSIFICATION

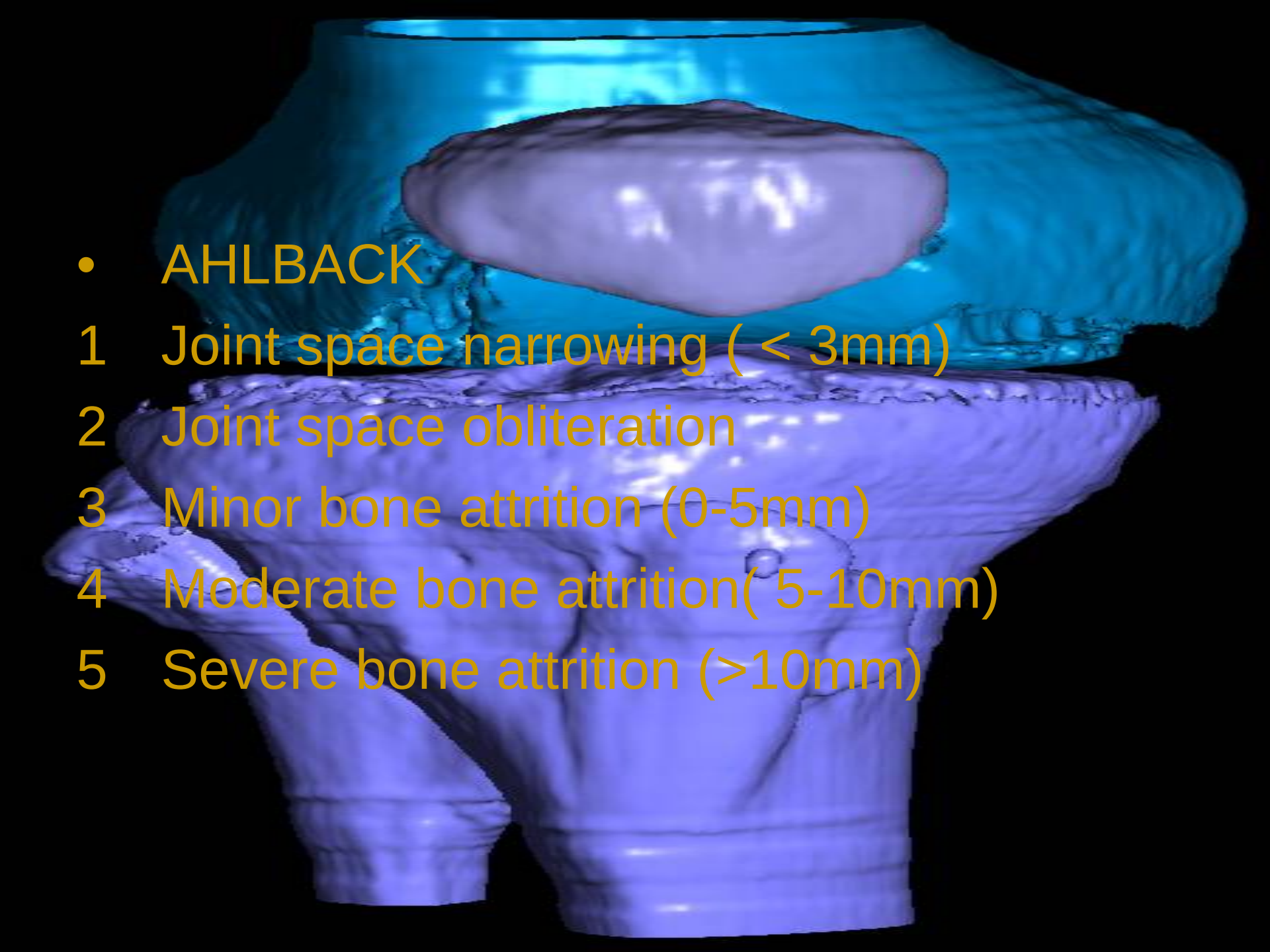
- KELLGREN & LAWRENCE

Grade 1- doubtful- minimal osteophytes

Grade 2- minimal- definate osteophytes

Grade 3 –moderate- moderate diminition of joint space

Grade 4- severe- joint space greatly impaired with sclerosis of subchondral bone



- AHLBACK

1 Joint space narrowing (< 3mm)

2 Joint space obliteration

3 Minor bone attrition (0-5mm)

4 Moderate bone attrition(5-10mm)

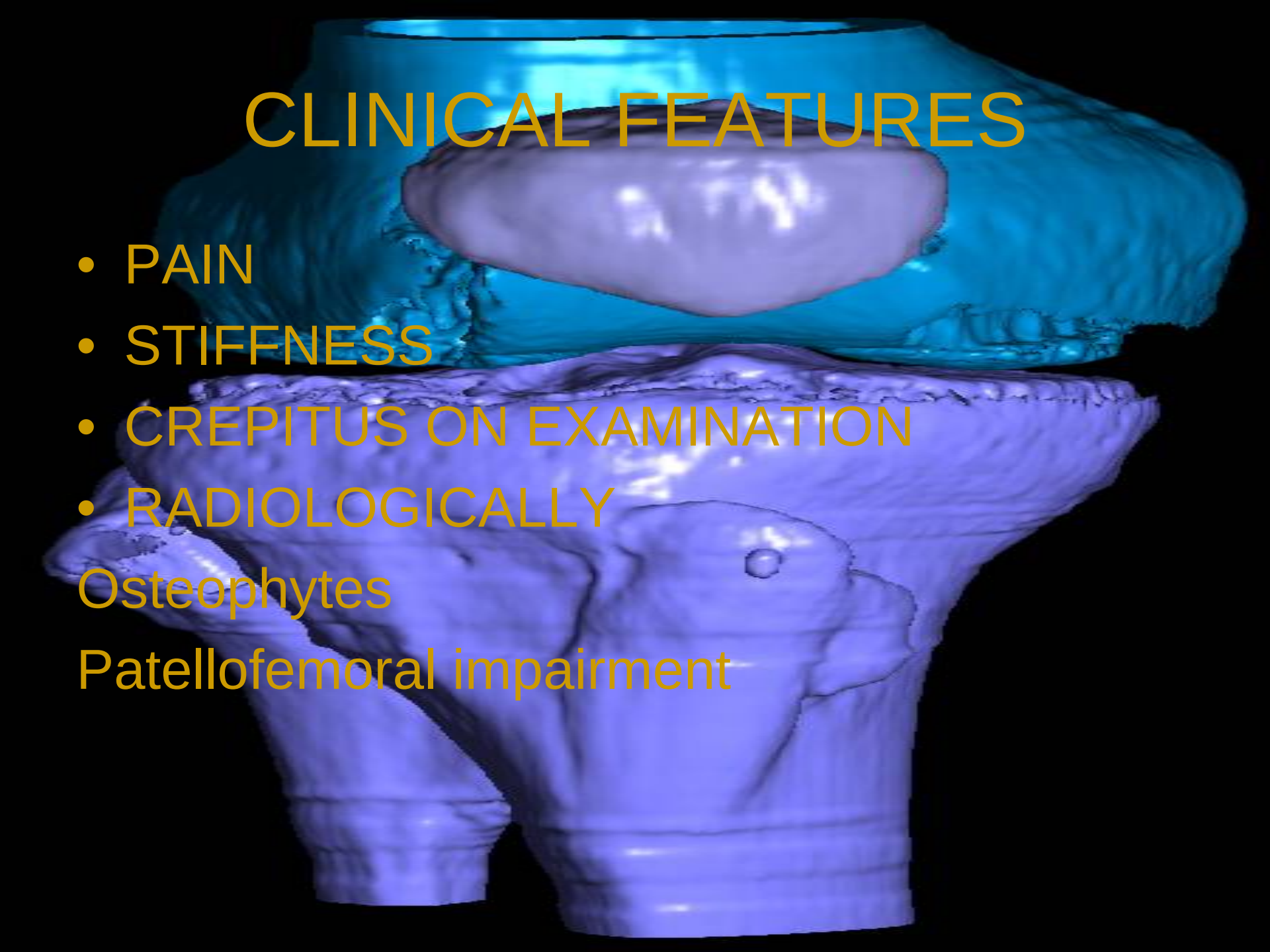
5 Severe bone attrition (>10mm)

CLINICAL FEATURES

- PAIN
- STIFFNESS
- CREPITUS ON EXAMINATION
- RADIOLOGICALLY

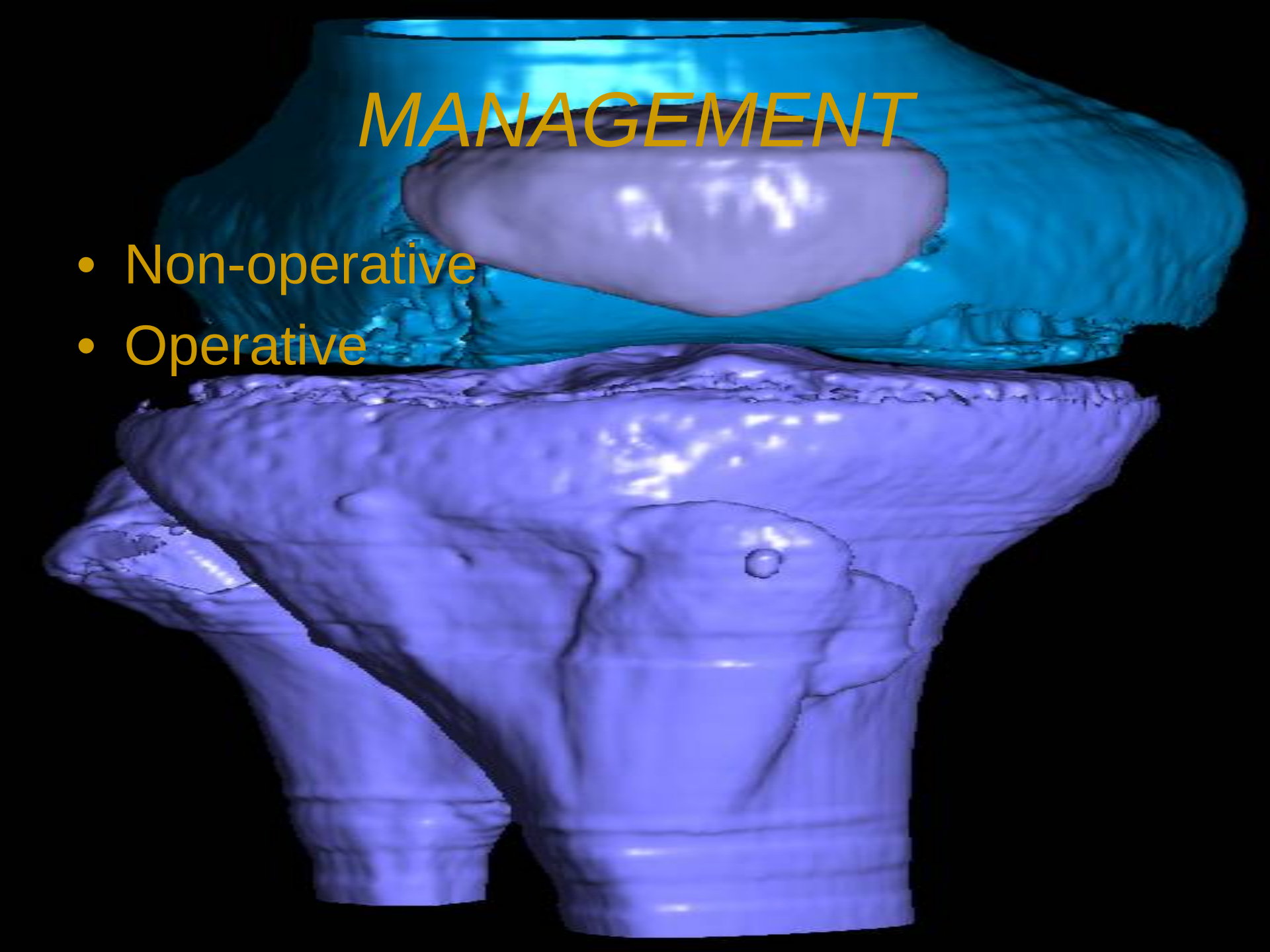
Osteophytes

Patellofemoral impairment



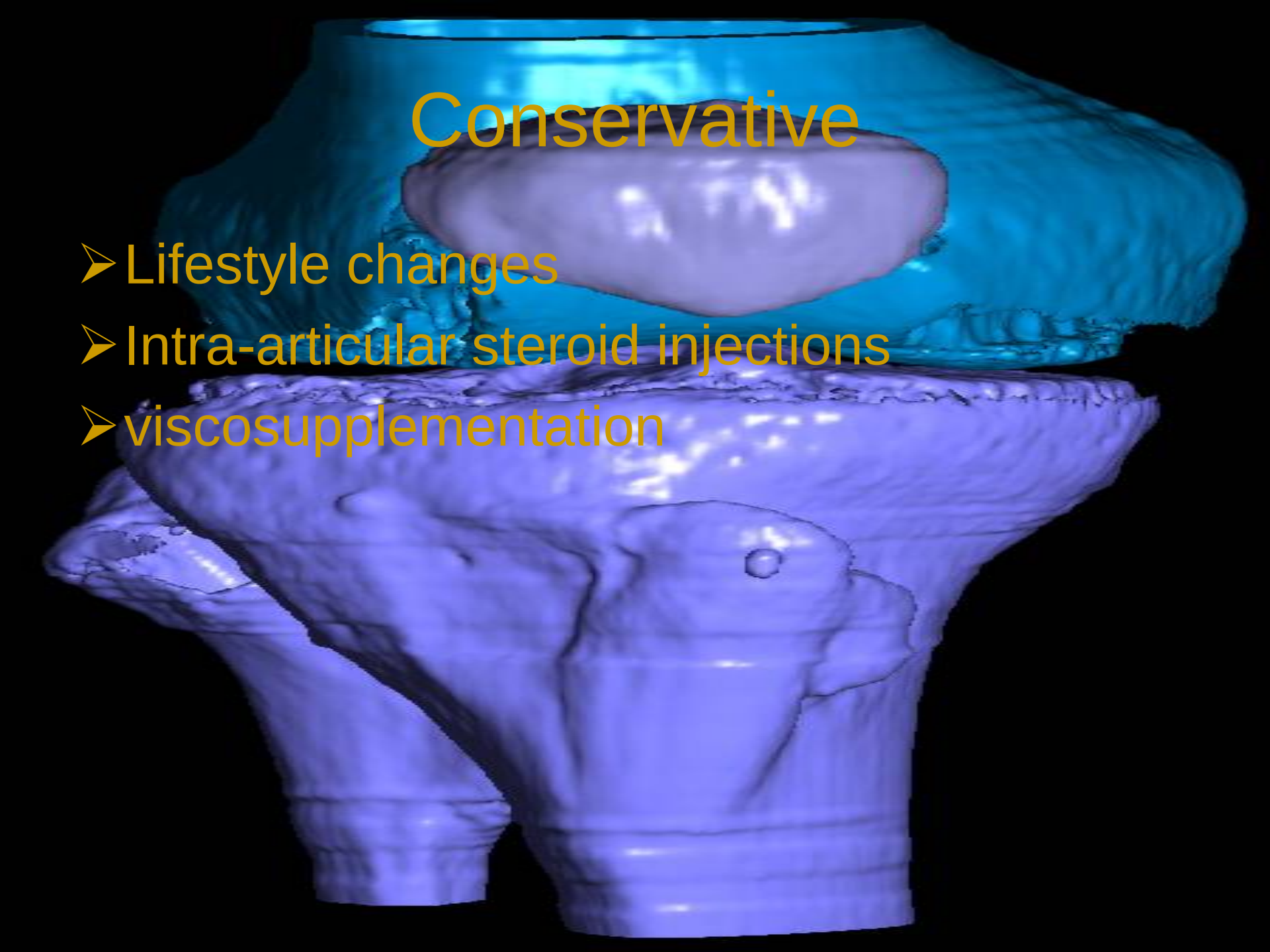
MANAGEMENT

- Non-operative
- Operative



Conservative

- Lifestyle changes
- Intra-articular steroid injections
- viscosupplementation

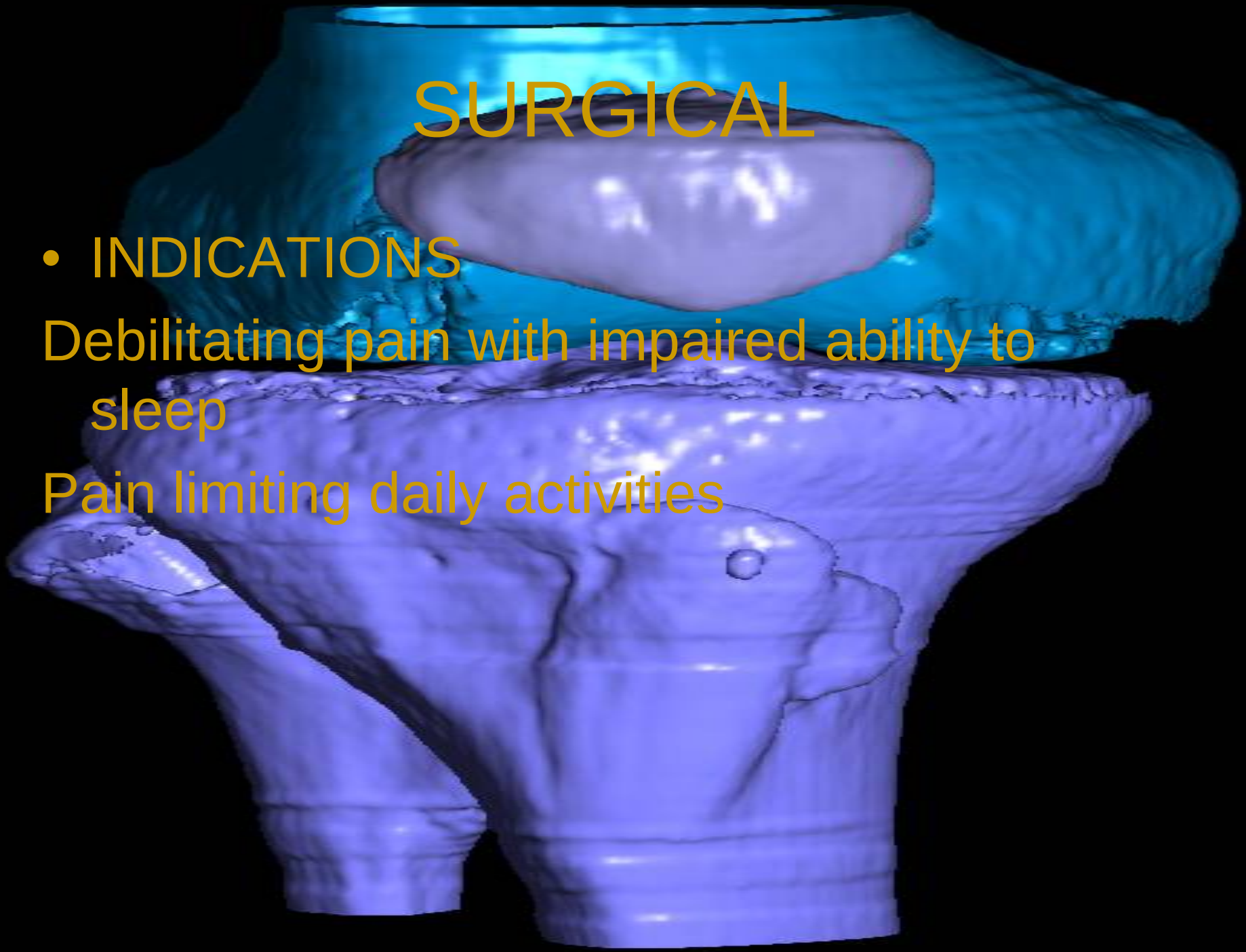


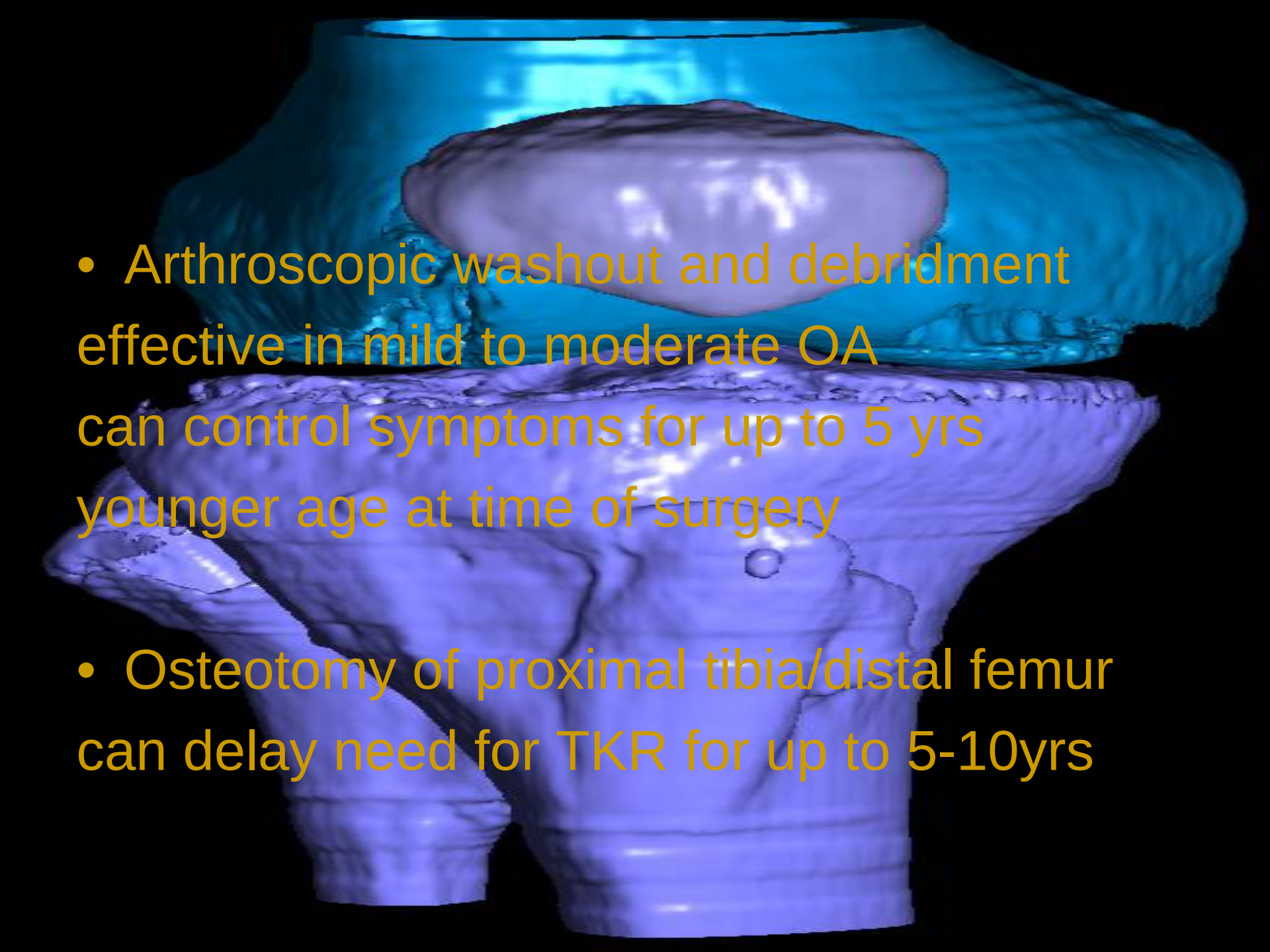
SURGICAL

- INDICATIONS

Debilitating pain with impaired ability to sleep

Pain limiting daily activities





- Arthroscopic washout and debridment effective in mild to moderate OA can control symptoms for up to 5 yrs younger age at time of surgery

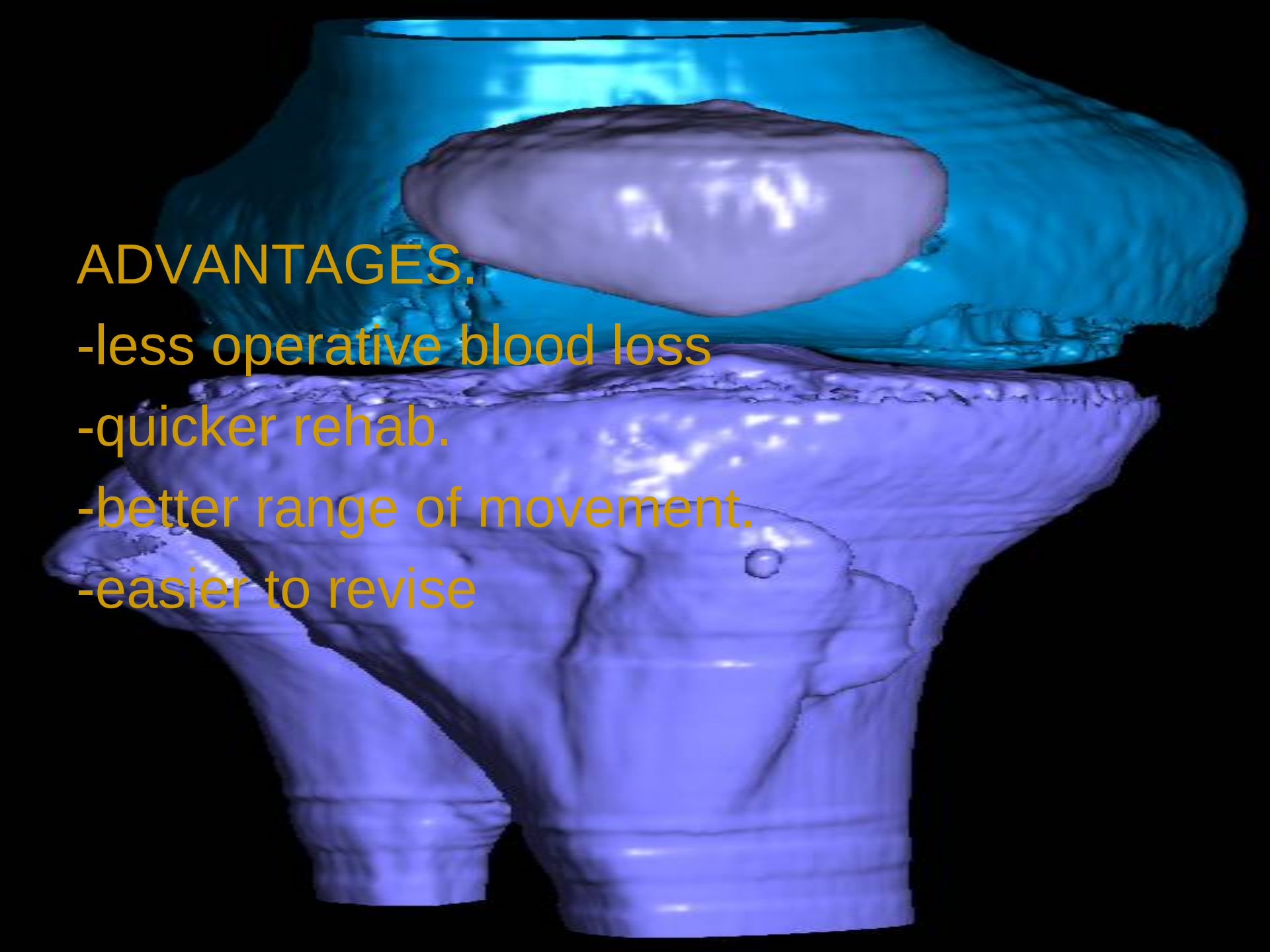
- Osteotomy of proximal tibia/distal femur can delay need for TKR for up to 5-10yrs

UNICOMPARTMENT KNEE REPLACEMENT

25% of patients have medial comp. OA

Prerequisites

- Stability of the joint
- Correctable varus deformity
- Fixed flexion deformity of <10 degrees
- Minimal lateral compartment disease


ADVANTAGES.
-less operative blood loss
-quicker rehab.
-better range of movement.
-easier to revise

TOTAL KNEE REPLACEMENT

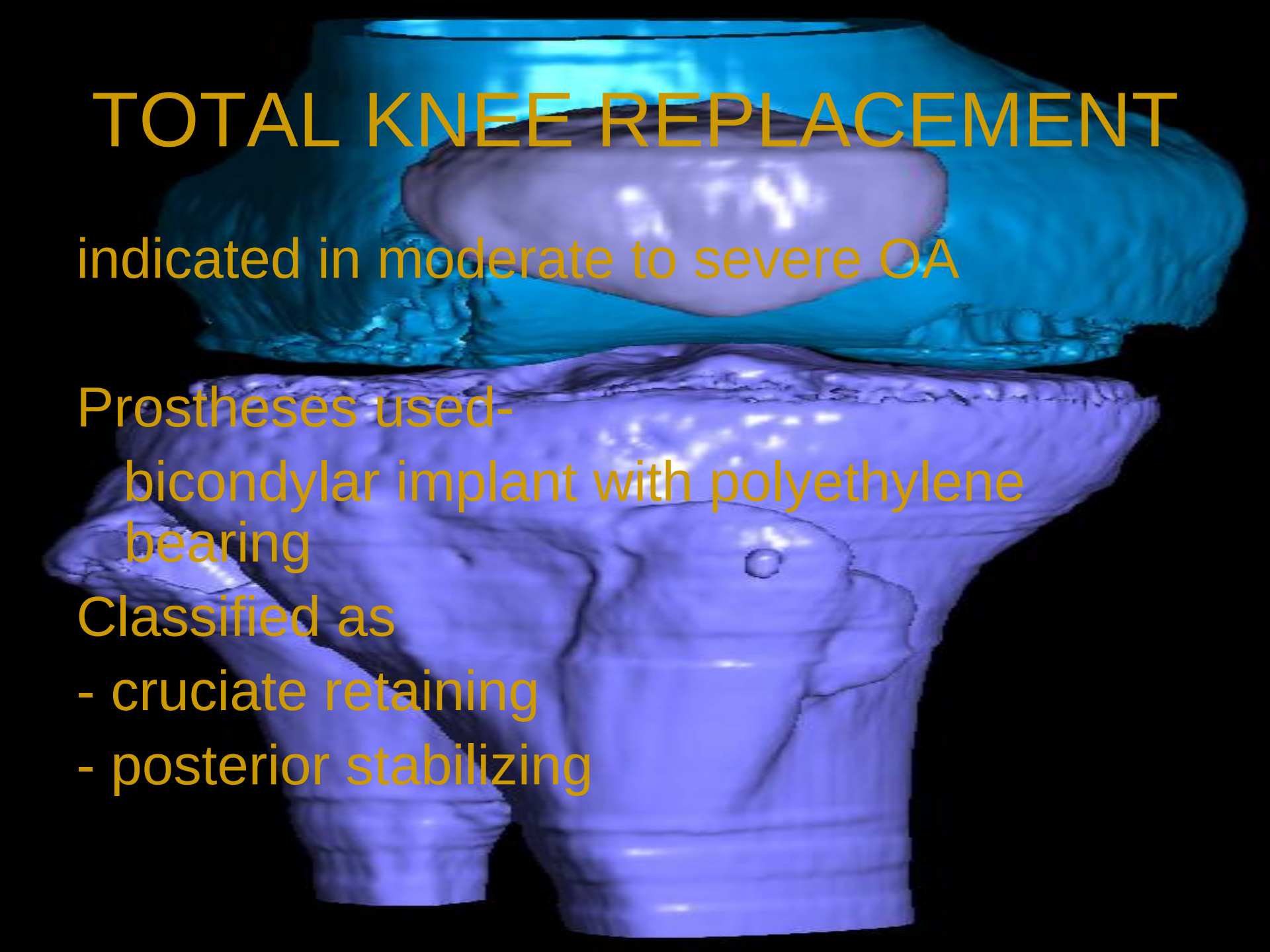
indicated in moderate to severe OA

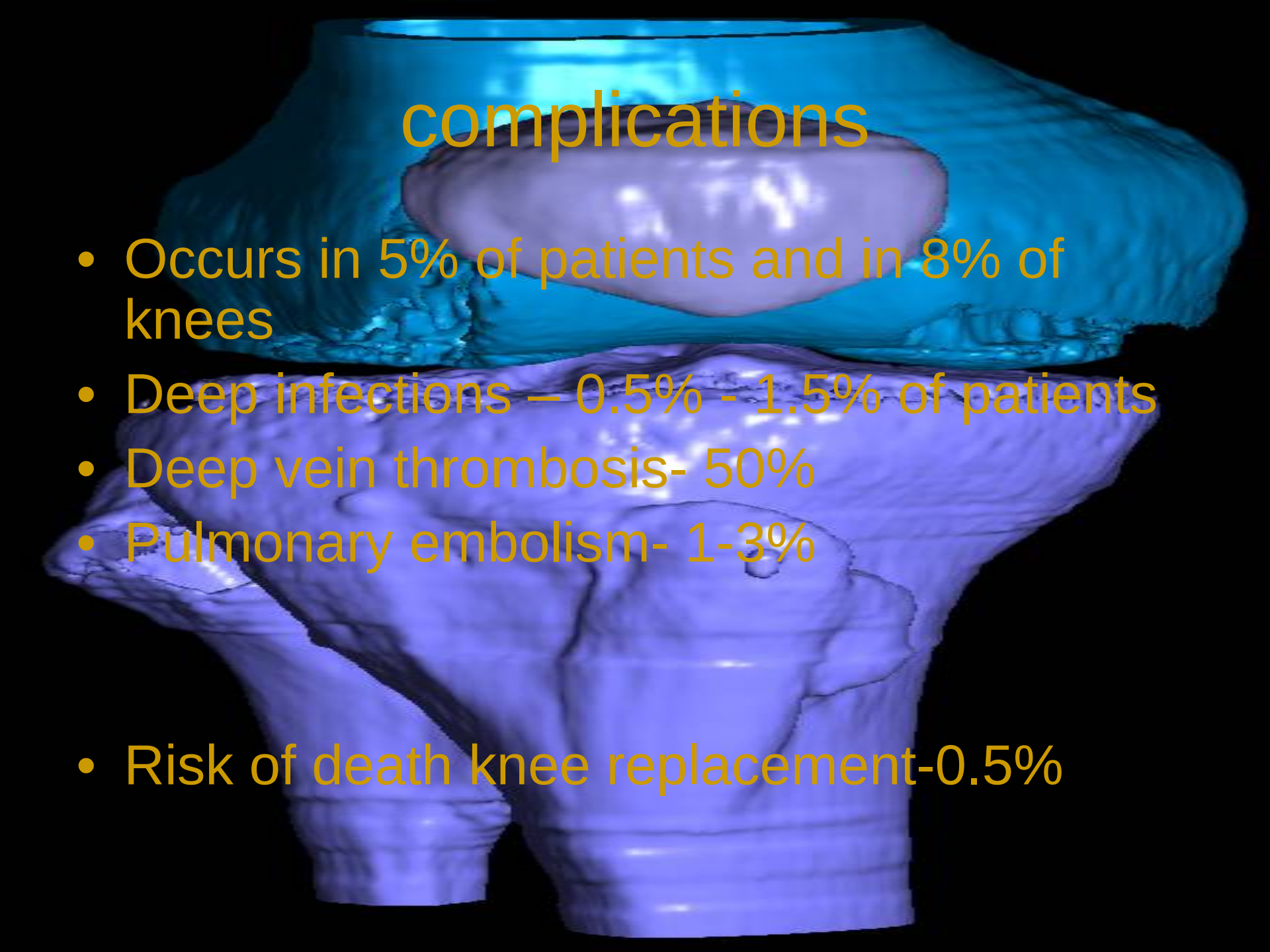
Prostheses used-

bicondylar implant with polyethylene bearing

Classified as

- cruciate retaining
- posterior stabilizing



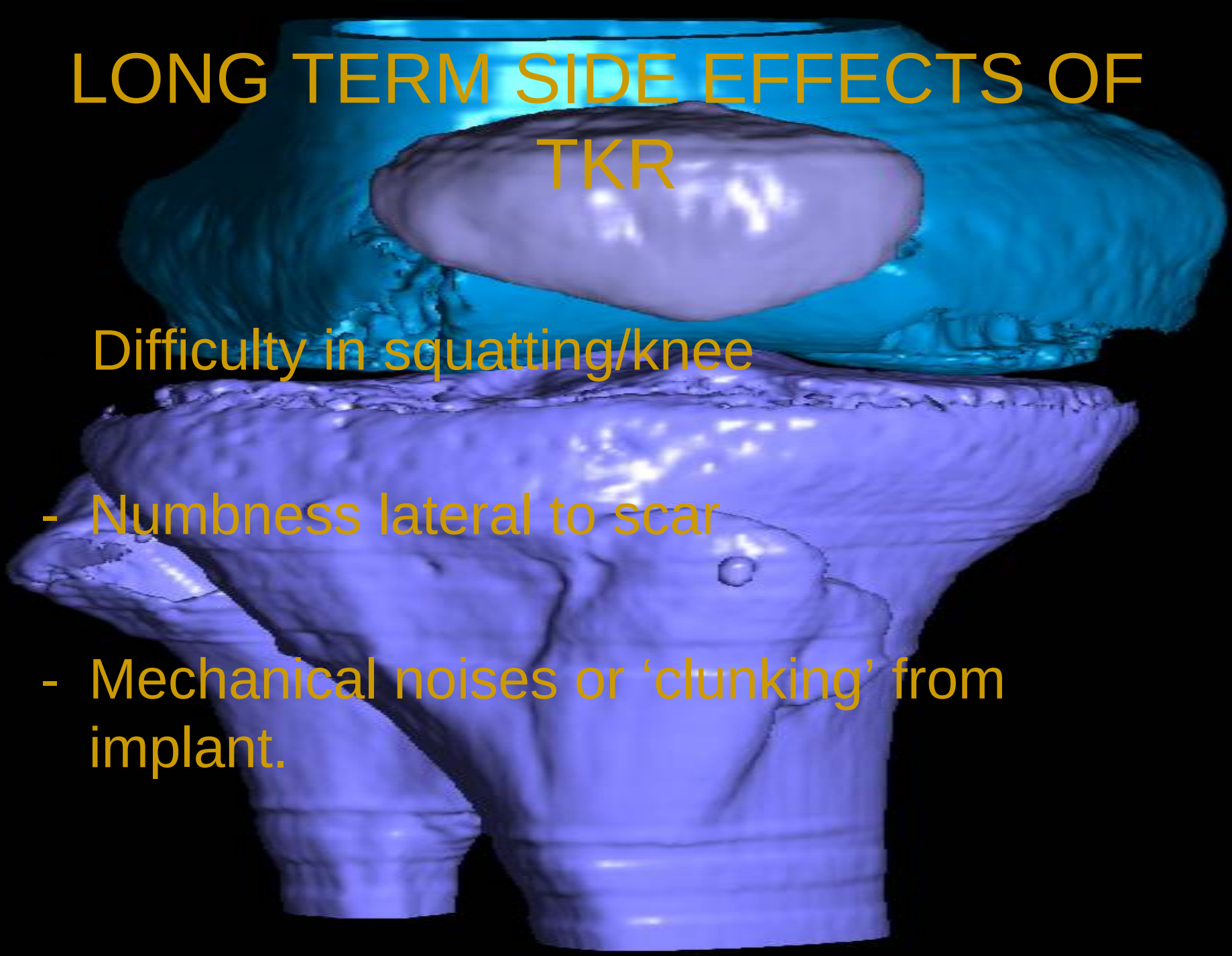


complications

- Occurs in 5% of patients and in 8% of knees
- Deep infections – 0.5% - 1.5% of patients
- Deep vein thrombosis- 50%
- Pulmonary embolism- 1-3%

- Risk of death knee replacement-0.5%

LONG TERM SIDE EFFECTS OF TKR



Difficulty in squatting/knee

- Numbness lateral to scar

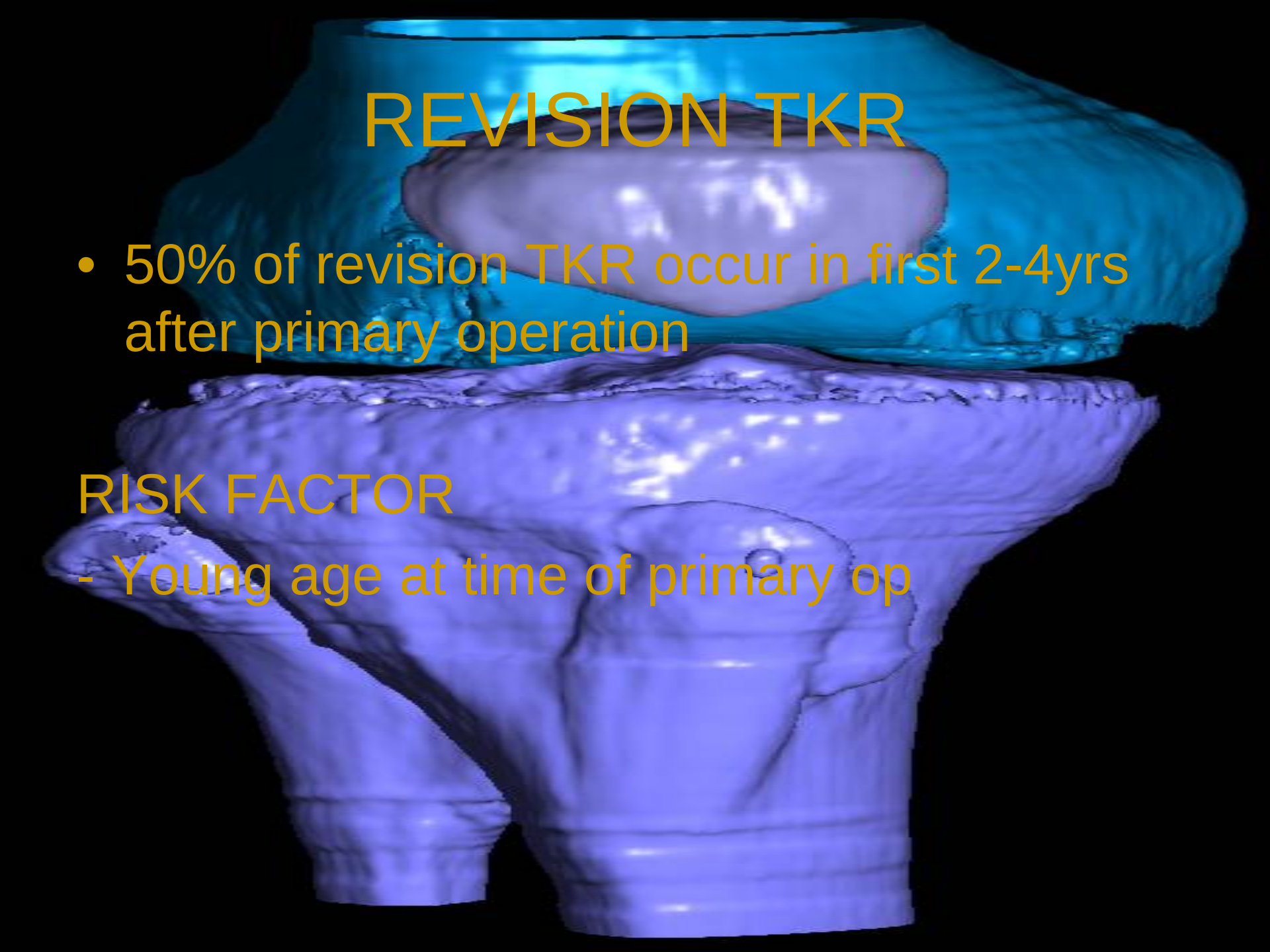
- Mechanical noises or ‘clunking’ from implant.

REVISION TKR

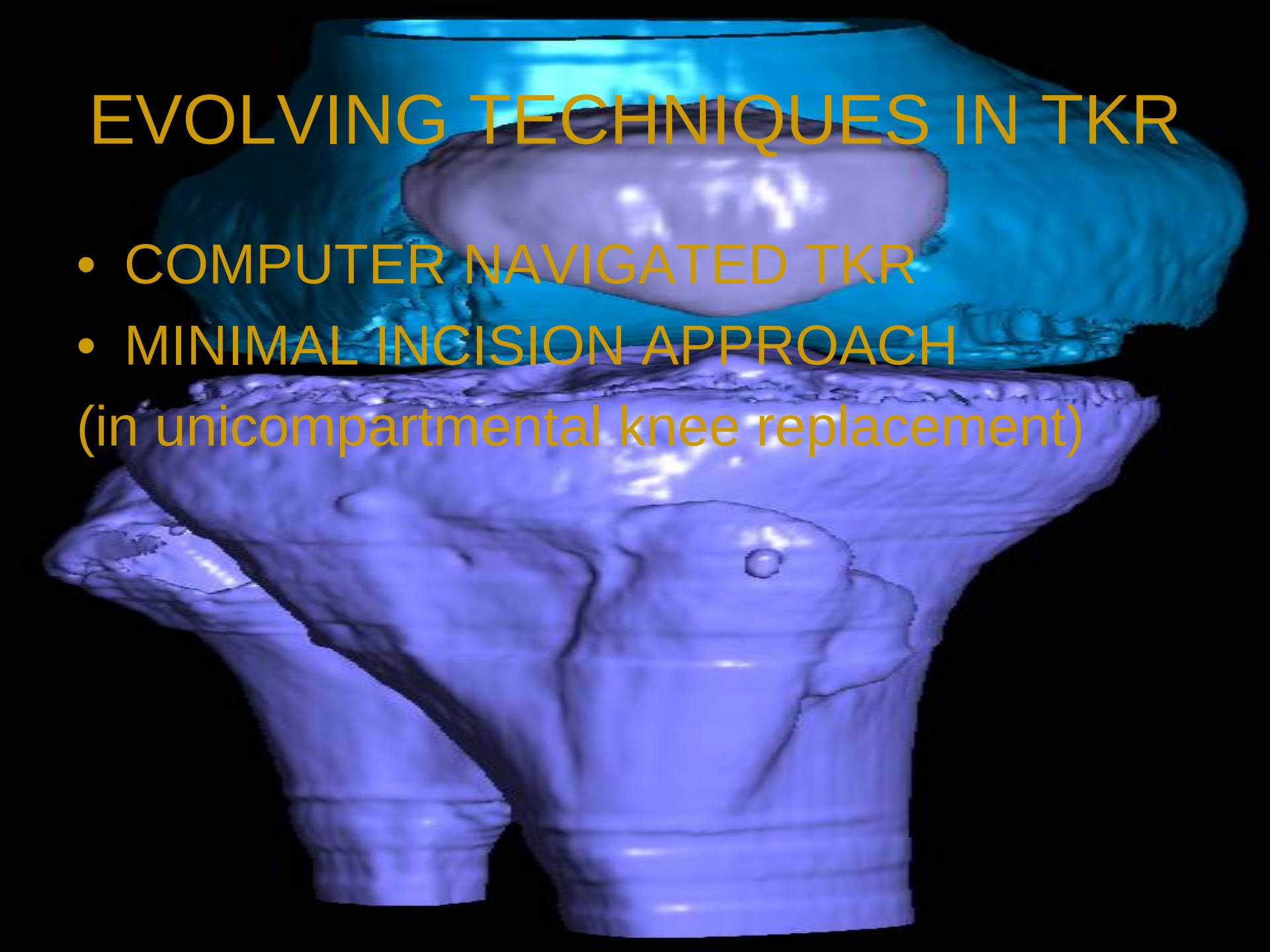
- 50% of revision TKR occur in first 2-4yrs after primary operation

RISK FACTOR

- Young age at time of primary op



EVOLVING TECHNIQUES IN TKR



- COMPUTER NAVIGATED TKR
- MINIMAL INCISION APPROACH

(in unicompartmental knee replacement)