

# genex

POWER TO RESTORE WITHOUT LEAVING A TRACE



The only remaining  
evidence of the trauma

# CASE 1- Non-Union of Right Tibia with Revision of Intra-medullary Nail

A male patient aged 34 was initially treated for right tibia and fibia fracture following a motorcycle accident. This was treated with a bilateral intra-medullary nail.

The patient presented with acute pain around the fracture site some 19 months after the initial operation.

X-ray revealed a healed fibula with a non-union of the distal tibia and a fracture through the nail.



# CASE 1- Non-Union of Right Tibia with Revision of Intra-medullary Nail

Immediately post-op



The broken nail was extracted and a new nail was inserted and locked distally with 2 locking bolts. The fracture site was decorticated and packed with *geneX*<sup>®</sup>.

At 10 months follow up the non-union has healed completely.

10 Months post-op



## CASE 2- Ankle Arthodesis

A male patient received severe compound fracture of the right ankle in a road traffic accident as a child aged 7. Patient now aged 50.

Patient seen in clinic for initial consultation. Virtually no movement, 1/100 on ankle score. X-rays showed complete loss of joint space but with good overall alignment.



# CASE 2- Ankle Arthodesis

Immediate Post-Op



Immediately post op, geneX clearly seen in the joint space

At 12 months post-op, patient still has some pain but ankle fused. geneX fully resorbed and replaced by lamellar bone

12 months Post-Op

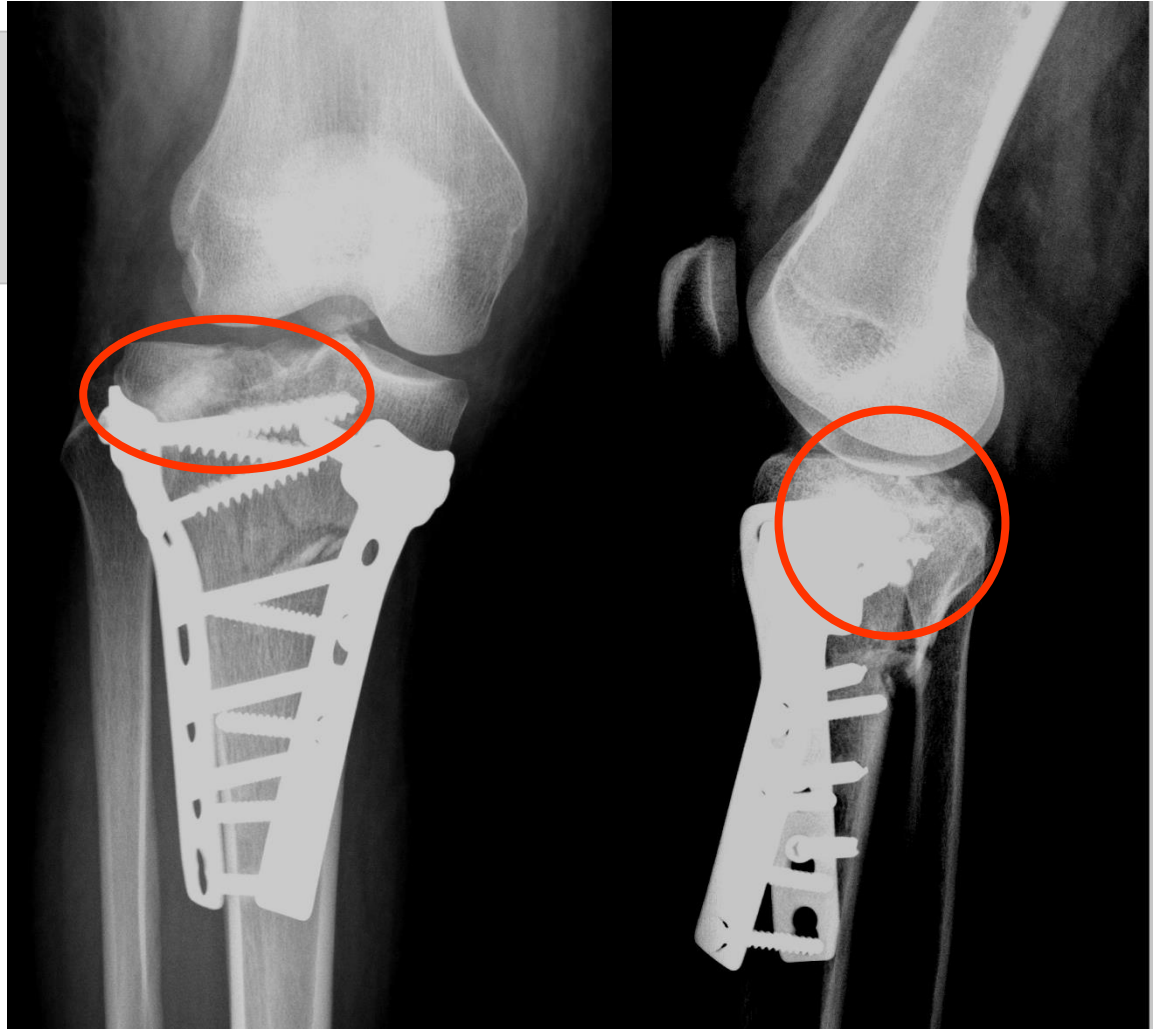


# CASE 3- Tibial Plateau Fracture(Schatzker type IV)



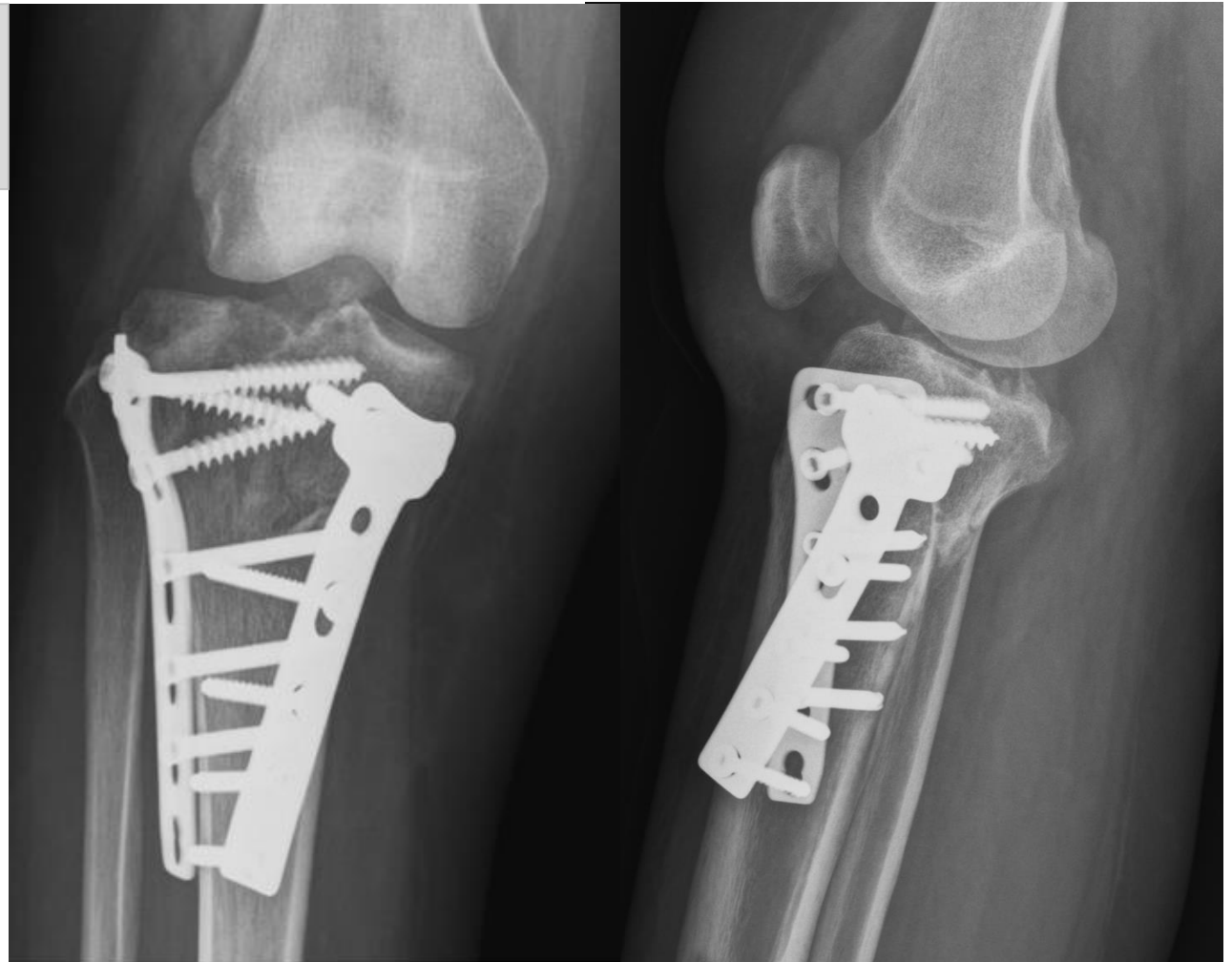
# CASE 3- Tibial Plateau Fracture(Schatzker type IV)

Using GeneX Bone substitute one month postoperatively



# CASE 3- Tibial Plateau Fracture(Schatzker type IV)

Using geneX  
3 months  
postoperatively



## CASE 3- Tibial Plateau Fracture(Schatzker type IV)

Solid bone union and  
removal of implants  
one year after index  
surgery



# CASE 4- Single Level Inter-Body Fusion

70 Yr Old Female  
Patient  
CT Data  
9 months Post op

**Fused**  
Bridging Trabecular  
Bone



## CASE 5- Child Bone Cyst

Male, 12.

Cyst in proximal humerus.

Following draining of cyst, the void was filled with **geneX** paste.



# CASE 5- Child Bone Cyst



## CASE 6- Depressed Tibial Plateau

70 year-old Male with end stage renal failure suffers a Depressed Tibial Plateau Fracture after fall while chasing a Goat.



# CASE 6- Depressed Tibial Plateau

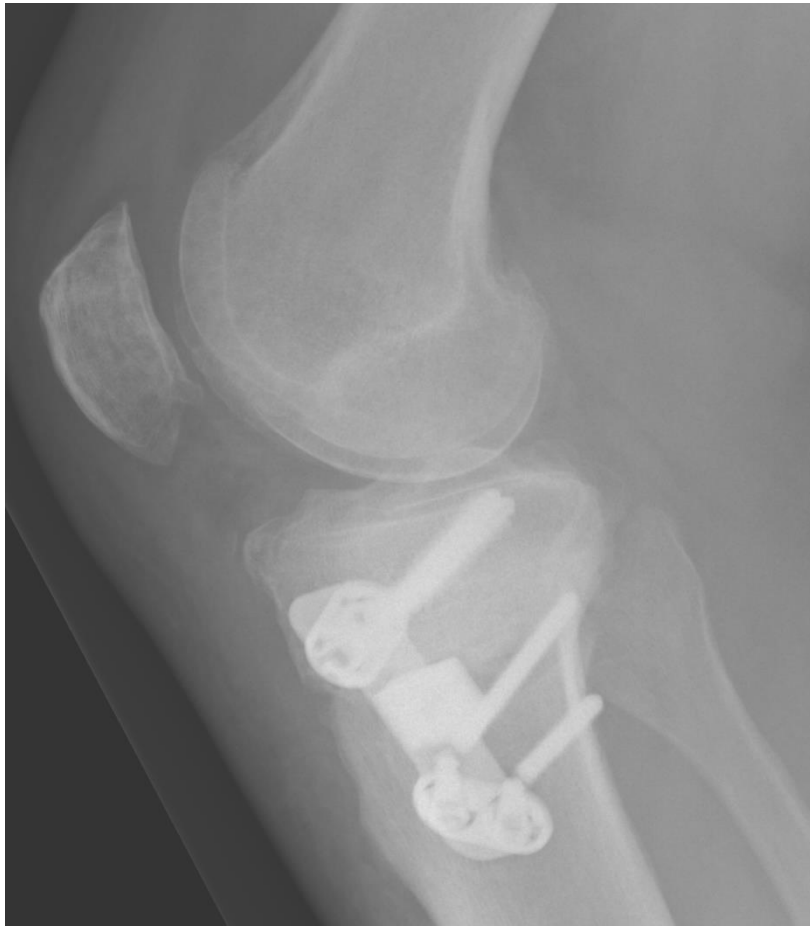


# CASE 6- Depressed Tibial Plateau



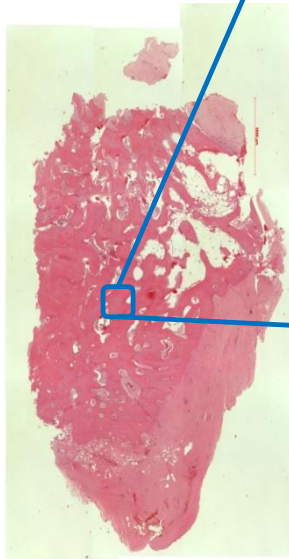
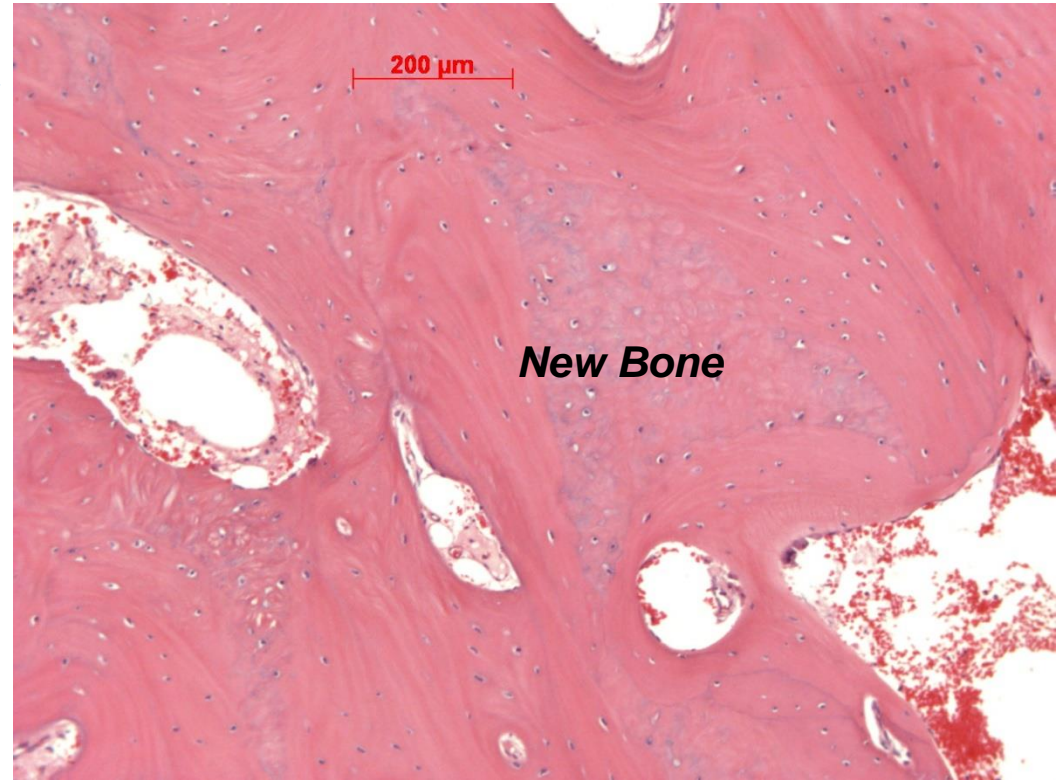
# CASE 7- Open-Wedge High Tibial Osteotomy

## Histological Evaluation of a Synthetic Bone Graft in a High Tibial Osteotomy at 2 Years Post Implantation.



# CASE 7- Open-Wedge High Tibial Osteotomy

Bone biopsy of the implantation site at 25 months post implantation confirms complete resorption of geneX and replacement with viable bone.



# CASE 7- Open-Wedge High Tibial Osteotomy



- 40 year old practising Orthopaedic Surgeon with Uni-condylar deformity.
- 15mm Wedge-10cc genex used

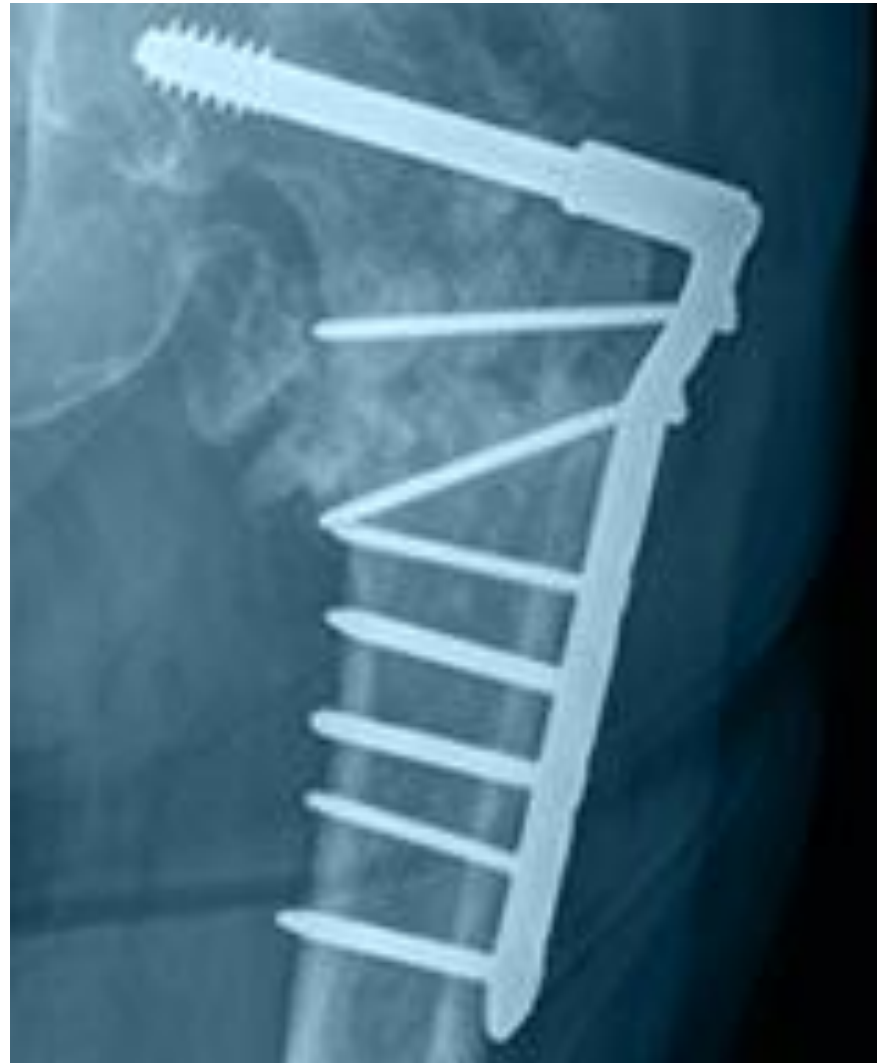
# CASE 8- Proximal Femur Revision Surgery

- 86 year-old Male with Proximal Femur Fracture.
- Subsequently Nailed. At 4 Months, Screw backs out.
- Revision surgery (DCS plating) with Bonegrafting planned



# CASE 8- Proximal Femur Revision Surgery

- At 12 months' follow-up the fracture had healed with complete absorption of genex. Patient had a good range of hip motion and was able to walk independently and manage stairs.



# CASE 9- Comminuted Calcaneal Fracture

- 47 year-old Female presents with comminuted calcaneal fracture following a fall from a height of 2m.
- Fractured reduced and fixed with Locking plate along with Genex.
- 3 Month post-op shows gradual graft absorption and fracture is stable



Figure 1: Pre-operative X-ray

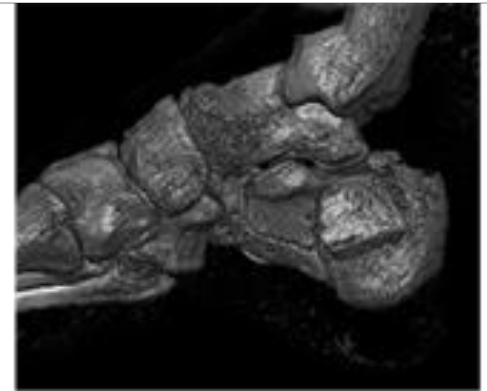


Figure 2: Pre-operative 3D CT Scan

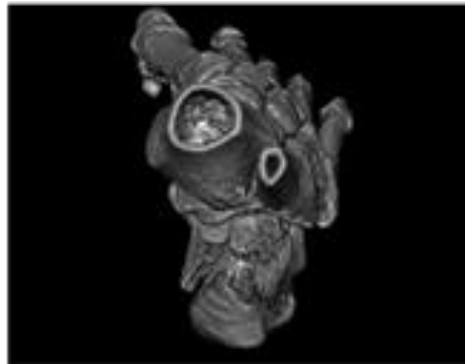


Figure 3: Pre-operative 3D CT Scan



Figure 4: Immediately post-op



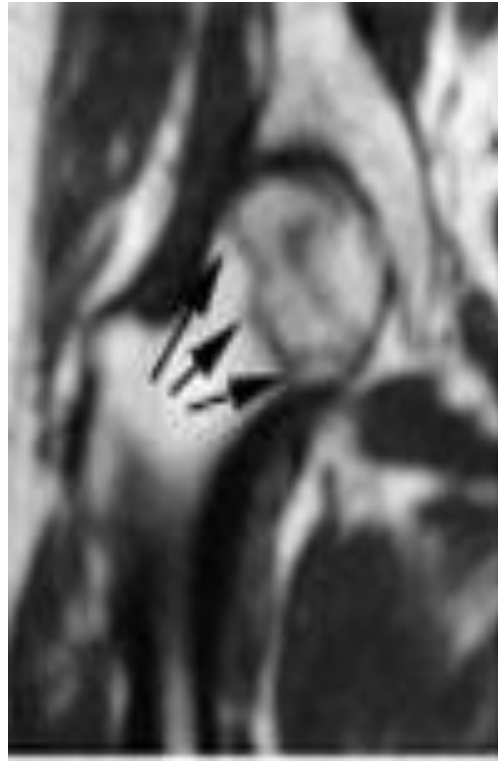
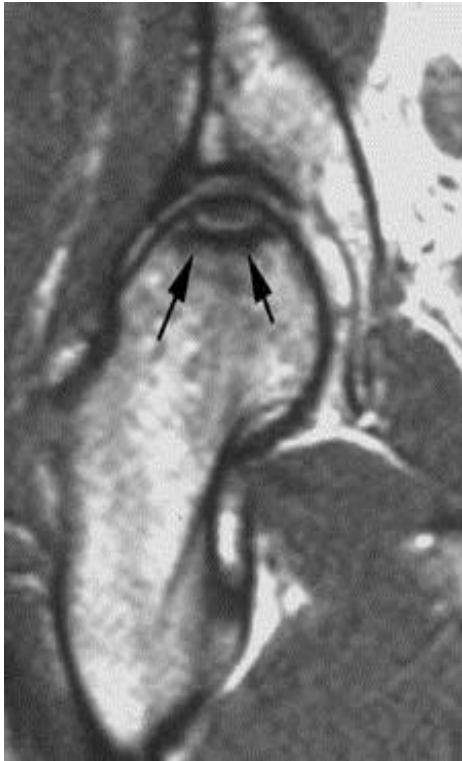
Figure 5: 2 weeks post-op



Figure 6: 3 months post-op

# CASE 10- Indication For Use-AVN of the Hip

## Osteo-Necrosis of The Hip



# CASE 10- Indication For Use-AVN of the Hip

## Core Decompression – Surgical Technique (hip):

- The classical surgical technique involves the use of either 8-10mm trephine or drill introduced from the lateral cortex of the proximal femur through the neck and into the avascular segment.





