

The early surgical treatment of arthritis consists of methods to repair cartilage and methods to reduce abnormal loading

Methods to repair cartilage include:

1) Chondroplasty - debriding and smoothing ragged edges

2) Microfracture - producing multiple small pin prick fractures to allow cells from bone marrow to enter knee and change into cartilage growing cells.

3) Osteochondral Autologous Transplant (OATs) - plugs of cartilage and bone harvested from non weightbearing areas of joint.

4) Autologous Chondrocyte Implantation (ACI) - cells of cartilage harvested and then grown in lab before reimplantation

Methods To reduce loading:

1) Correction of abnormal alignment by "breaking" and "re setting" bone (Osteotomy)

2) Correction of intra articular steps following fractures

3) Altering normal alignment of limb to "off load" damaged compartment (Osteotomy)