Effect of Bone-Void Fillers in Serial Union Patterns After Opening-Wedge High Tibial Osteotomy

Opening-wedge high tibial osteotomy (OWHTO) is a surgical procedure to treat medial unicompartmental knee osteoarthritis.

Does opening gap formed post OWHTO lead to delayed union or nonunion?

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Despite the different gap healing patterns, OWHTO without bone graft achieved comparable bone union, but surpassed the other graft materials at around 6 months.

A similar degree of union was observed in all 3 groups at 1 year postoperatively.

No significant differences in mediolateral bone-healing at 6 weeks or 3 months post-surgery.

No correlations seen between correction degree with bone union beyond 3 months postoperatively.

Group A: treated with hydroxyapatite chip bone
Group B: treated with allogenic chip bone
Group C: no bone graft

Modified van Hemert scoring system used
Correlations between the correction degree and bone union scores evaluated

Cohort of 97 knees
Anteroposterior radiograph obtained

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Comparative Analysis of Serial Union Patterns After Opening-Wedge High Tibial Osteotomy with and without Bone-Void Fillers

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