

전방십자 재건술에서 자가슬건의 뼈조각 보강술
Augmentation of autologous hamstring graft during ACL
reconstruction using the bone chip technique

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Technical Note

The use of autologous quadrupled hamstring tendon graft is a well know technique for anterior cruciate ligament reconstruction. Sound fixation which prevents slippage and promotes biological healing allows for aggressive rehabilitation and is the key to ensure good functional outcome and prevent the tunnel enlargement. A tightly fitting graft of adequate diameter not only ensures better initial fixation, but also allows enhanced bone to tendon union. However, in certain situations wherein the diameter of the tendon graft may be insufficient due to anatomic variations or premature amputation during the harvest or revision ACL reconstruction, this may be difficult to achieve. We describe a technique to augment the thickness of the hamstring tendon graft during ACL reconstruction using cancellous bone chips so as to ensure optimum tunnel fit of the graft and stable fixation. Cancellous bone is obtained arthroscopically from the femoral intercondylar notch using a notchplasty osteotome (Arthrex, Naples, FL). This simple technique effectively enhances graft fixation and stability.

Key Words

ACL reconstruction – Chip bone – Hamstring tendon.– Double looped tendon graft.