اليحث الرابع

Anterior cervical discectomy and fusion using interbody cage packed with autologous clavicle bone Graft: Novel technique.

Interdisciplinary Neurosurgery: Advanced Techniques and Case Management 29
(2022) 101570

ABSTRACT

Background: The aim of this study is to assess the fusion power, donor site pain, patient satisfaction and safety of autologous cancellous clavicle bone graft in ACDF. Summary of Background Data: Traditional autologous iliac graft was the most popular graft done for ACDF, however seeking for better outcomes for patients and avoiding extensive bony loss with its sequences of postoperative pain had raised our concern to use autologous clavicle cancellous graft as an alternative.

Methods: Between May 2016 and August 2020, 72 patients indicated for anterior cervical discectomy and fusion (ACDF), 33 males and 39 females, ranging in age from 30 years to 70 years, were divided into 2 groups, group A included 36 patients operated upon with traditional way with bone harvested from iliac crest, group B included 36 patients operated upon using cancellous bone harvested from clavicle. History of patients, clinical status and radiological data were registered. We used VAS scores; patient satisfaction and ODI to assess clinical outcomes in both groups with a period of one year follow up.

Results: In all patients fusion was 0%, 25%, and 100% in 1 month, 3 months and 6 months of radiological follow up respectively. VAS pain score of donor site was zero at 1 month postoperative in all patients of clavicle group while only 27 patients of iliac group reached zero 6 months postoperative.

Conclusion: ACDF with autologous clavicle cancellous bone graft has the advantage of reducing donor-site morbidities and complications; it reaches an excellent level of fusion and patient satisfaction with postoperative donor site pain, healing and cosmetically.