

Title: Recovery and complications after iliac crest bone harvest for alveolar cleft bone grafting

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Background: The use of iliac crest bone graft harvested through an open approach for the repair of alveolar clefts has been criticized as having an unacceptable complication profile and requiring long recovery times. However, this perception does not coincide with our experience. The purpose of this study is to review our outcomes and patients' experiences with iliac crest bone harvest for alveolar bone grafting, and to compare our complication rates and recovery times to the literature.

Methods: A retrospective chart review was performed for 50 sequential patients with iliac crest bone harvested for alveolar cleft reconstruction. Data was collected on recovery time, complications, outcomes, and subjective recollections of the recovery experience. A literature search was performed to allow for historical comparisons and evaluation of alternative techniques.

Results: We did not identify any serious donor site complications in our patient population. Only 30% of patients complained acutely of uncontrolled pain, 50% never required narcotic analgesics, and 92% were discharged home the day after surgery. Eighty percent limped for less than a week, and all but one returned to unlimited activity by one month post-operatively.

Conclusions: Open iliac crest bone harvest for repair of alveolar clefts is a well-tolerated procedure, with acceptable recovery times. Our patient population does not experience adverse events that are frequently cited as risks for iliac crest bone graft harvest. There is a favorable complication profile when compared to other autogenous bone graft harvest sites, and should continue to be considered the optimal donor site in alveolar cleft bone grafting.