

AVITUS[®] LITERATURE REPORT

PROXIMAL TIBIA BONE GRAFT OUTCOMES REVIEW



COMPLICATIONS, HARVEST SITE VOLUME AND FUSION RATES FOLLOWING PROXIMAL TIBIA BONE GRAFT (PTBG) HARVESTING: A SYSTEMATIC REVIEW OF 1724 PTBG HARVESTS.* [1-20]	
3.6%	Minor Complication Rate (62/1724 patients).
0.3%	Major Complication Rate (6/1724 patients). <ul style="list-style-type: none"> • 5 of 6 reported post-op fractures resolved without surgical intervention. • Fractures due to post-op fall injuries.
21cc	Average volume of cancellous bone acquired from the proximal tibia.
45cc	Maximum harvest volume reported from the proximal tibia.
0	Post-op harvest site fractures when patient observed 6 weeks nonweightbearing status with proper location of cortical entry for harvest site.
94%	Average fusion rate reported with proximal tibia bone graft across 131 patients, 4 peer-reviewed studies. Comparable to Iliac Crest Fusion rates.

*DATA TABLES AND REFERENCES ON PAGE 2

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PROXIMAL TIBIA BONE GRAFT HARVEST VOLUME AND COMPLICATION RATES

Primary Procedure	Study [Author et al. (YYYY)] [#citation]	# Of Harvests	Avg Uncompressed Volume (cc)	Max Uncompressed Volume (cc)	Time of Harvest (mins)	Major Complication Rate (%)	Minor Complication Rate (%)
Foot and Ankle Procedures	Lukasiewicz et al. (2021) [5]	9	27	45	5	0.0	0.0
OMFS / Cleft Palate	Catone et al. (1992) [6]	21	25	42	N/A	0.0	0.0
OMFS / Cleft Palate	Lezcano et al. (2007) [7]	31	23	35	22	0.0	6.4
OMFS / Cleft Palate	Hernandez-Alfaro et al. (2005) [8]	38	28	30	14	0.0	5.2
Foot and Ankle Procedures	Geideman, Early, Brodsky (2004) [9]	155	N/A	30	N/A	0.0	2.5
Wrist Reconstruction	Rancy et al. (2017) [3]	14	18	25	28	0.0	14.0
OMFS / Cleft Palate	Vura et al. (2021) [10]	15	21	24	N/A	0.0	20.0
OMFS / Cleft Palate	Hughes et al. (2002) [11]	75	7.5	10	N/A	2.6	2.6
OMFS / Cleft Palate	Van Damme et al. (1996) [12]	40	40	N/A	20	0.0	0.0
OMFS / Cleft Palate	Marchena et al. (2002) [13]	15	22	N/A	58	0.0	0.0
Fracture / Non-Union / Tumor	Owoola et al. (2010) [14]	56	9	N/A	19	0.0	3.5
Non-Union / Segmental Defect	Salawu et al. (2017) [15]	43	7	N/A	12	0.0	2.3
Foot and Ankle Procedures	Dalal et al. (2015) [1]	46	N/A	N/A	N/A	4.3	2.0
Foot and Ankle Procedures	Anderson et al. (2014) [2]	43	N/A	N/A	N/A	0.0	0.0
Orthopaedics / Foot & Ankle	Attia et al. (2021) [16]	625	N/A	N/A	N/A	0.1	1.9
Foot and Ankle Procedures	Whitehouse et al. (2006) [17]	148	N/A	N/A	N/A	0.0	0.6
Fracture / Non-Union	Alt et al. (1999) [18]	54	N/A	N/A	N/A	0.0	1.9
OMFS / Cleft Palate	Lilja et al. (1987) [19]	66	N/A	N/A	N/A	0.0	0.0
Trauma Cases	O'Keefe et al. (1991) [20]	230	N/A	N/A	N/A	1.4	0.8

FUSION RATES WITH PROXIMAL TIBIA BONE GRAFT

Primary Procedure	Study [Author et al. (YYYY)] [#citation]	Sample Size	Fusion Rate
Foot and Ankle Procedures	Dalal et al. (2015) [1]	46	96%
Foot and Ankle Procedures	Anderson et al. (2014) [2]	43	95%
Wrist Reconstruction	Rancy et al. (2017) [3]	14	93%
Foot and Ankle Procedures	Sooahoo et al. (2008) [4]	28	93%

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