

RESULTS

FREEDOM[®]



KNEE

Early High Flex Results

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Prior Studies and Literature

Early Results for High Flex TKA

■ LPS-Flex knees (10 pts, average age 65, Osteoarthritis)

– ROM:

- Pre-Op: 125° (115-145°) :selected patients
- Post-Op:
 - 6 weeks 115° (100-130°)
 - 6 months 136° (135-145°)
 - 1 year 139° (135-145°)

Scuderi, G. et al. Harvard 32nd Annual Hip and Knee Course, October 2002

■ Hy-Flex II (11 knees, RA, average age 58) ROM 113°-122° (11%)

Yamazaki, J. et al., Arch Ortho Trauma Surg., 2002)

Study Protocol Summary

- Single surgeon / same approach / same hospital / same PT protocol
- System 1 - LPS High flex
 - 30 pts
 - Avg age: 63
 - Dx: osteoarthritis
- System 2 - Freedom High Flex Knee
 - 30 pts
 - Avg age: 63
 - Dx: osteoarthritis

Zimmer LPS High Flex Knee

Time Period	Flexion/ σ	Range	Notes
Pre-op	115°/5°	100° - 140°	
2 weeks	75°/4°	60° - 90°	
6 weeks	110°/5°	80° - 115°	3 manipulations
3 months	120°/4°	115°-125°	
6 months	135°/5°	120°-135°	
1 year	138°/8°	130°-140°	target flexion reached

Maxx Freedom Knee

Time Period	Flexion/ σ	Range	Notes
Pre-op	112°/4°	105° - 135°	
2 weeks	95°/5°	90° - 110°	
6 weeks	110°/4°	95° - 125°	0 manipulations
3 months	125°/5°	110°-135°	
6 months	138°/5°	130°-140°	target flexion reached
1 year	143°/5°	135°-145°	

Flexion Comparison

Time Period	NexGen	Freedom	Diff
Pre-op	115°	112°	3°
2 weeks	75°	95°	20°
6 weeks	110°	110°	-
3 months	120°	125°	5°
6 months	135°	138°	3°
1 year	138°	143°	5°

Degrees Flexion vs. Pre-op

Time Period	Nexgen	%Pre-op	Freedom	%Pre-op
Pre-op	115°	-	112°	-
2 weeks	75°	65.2%	95°	84.8%
6 weeks	110°	95.7%	110°	98.2%
3 months	120°	104.3%	125°	111.6%
6 months	135°	117.4%	138°	123.2%
1 year	138°	120.0%	143°	127.7%

Conclusions

- Both systems improved flexion post-op and achieved target flexion
- On average, Freedom Knee:
 - Achieved target flexion in 6 mo. Vs. 12 mo.
 - Achieved significantly greater flexion after 2 weeks (95 deg. Vs. 75 deg).
 - Achieved greater improvement post-op when compared to pre-op (127% of pre-op ROM vs. 120%)