

## Summary of Hallux Valgus Correction

Intervention	Disease	Results	KMbase Ref.
Proximal chevron osteotomy	Moderate to severe hallux valgus (n=93)	Clinical and radiographic results were stabilized beyond 12 months after proximal chevron osteotomy in patients with moderate to severe hallux valgus	무지외반증에 대한 근위갈매기형 절골술 시행 후 임상적 및 방사선학적 결과는 언제 안정화되는가? When Do Clinical and Radiographic Results Stabilize after Proximal Chevron Osteotomy in Hallux Valgus? (2015)
Minimal incision distal metatarsal osteotomy (MIDMO)	Moderate to Severe Hallux Valgus (n=48)	Radiological data of hallux valgus angle, first intermetatarsal angle, and distal metatarsal articular angle on plain radiographs were analyzed.	중등도 이상의 무지 외반증에서 최소 절개를 이용한 원위 중족골 절골술의 결과 Results of Minimal Incision Distal Metatarsal Osteotomy for Moderate to Severe Hallux Valgus (2015)
Agonist Contraction(AC); Hold-relax with Agonist Contraction(HR-AC)	Hallux Valgus (n=20)	HR-AC technique were more effective than AC technique in increase in abductor hallucis muscle activity.	신장운동의 적용방식이 무지외반증의 각도와 근활성도 변화에 미치는 영향 Effect of Application Methods of Stretching Exercise on Angular Variation and Muscle Activation Changes in the Hallux Valgus (2015)
Conservative management (taping therapy and hallux valgus device)	Women with Hallux Valgus (n=20)	The Hallux valgus group with Foot Device (HVG-FD), Hallux valgus group with Taping (HVG-Tp) and HVG-FD&Tp was not different from CG in hallux valgus angle.	중재방법에 따른 엄지발가락 가쪽힘줄 환자의 발바닥 압력분포에 미치는 영향 The Effect of Intervention on Hallux Valgus Patient's Foot Pressure (2015)
Operative Correction	Hallux valgus and hammer toes deformity (n=28)	Combined operation for hallux valgus and concomitant hammer toes deformity seems to be a good treatment, because of high postoperative satisfaction, reliable pain relief, improvement of gait ability and cosmetic appearance.	망치지 기형을 동반하는 무지 외반증에 대한 수술적 교정치료 Operative Correction for Hallux Valgus Combined with Hammer Toes Deformity (2014)
Proximal chevron osteotomy and distal soft tissue procedure	Hallux valgus with severe hallux valgus angle (HVA) and moderate intermetatarsal angle (IMA) (n=41)	Recurrence rate for severe hallux valgus with moderate IMA is higher than that of severe hallux valgus with severe IMA.	중등도 중족골간 각을 가지는 중등도 무지외반증의 특징 Characteristics of Severe Hallux Valgus Deformity with Moderate Intermetatarsal Angle (2014)
Distal Chevron Osteotomy with and without Akin Osteotomy	Moderate to Severe Hallux Valgus (n=63)	Patients who underwent Akin osteotomy showed radiographically larger angle correction but less subjective satisfaction.	중등도 및 중증의 무지 외반증에서 Akin 절골술 동반 유무에 따른 원위부 갈매기형 절골술의 수술 결과 비교 Comparison of Operative Results of Distal Chevron Osteotomy with and without Akin Osteotomy for Moderate to Severe Hallux Valgus (2014)

Proximal Opening Wedge Osteotomy Using a Low Profile Plate: Comparison with Proximal Chevron Osteotomy Fixed with K-wires	Hallux Valgus (n=32)	Proximal first metatarsal opening wedge osteotomy with stable fixation using low profile plate is an effective surgical option for correction of hallux valgus deformity.	The Clinical Results of the Proximal Opening Wedge Osteotomy Using a Low Profile Plate in Hallux Valgus: Comparison with Proximal Chevron Osteotomy Fixed with K-wires (2013)
Scarf Osteotomy	Recurrent Hallux Valgus (n=12)	Scarf osteotomy can be a useful for the treatment of recurrent hallux valgus deformity.	재발한 무지 외반증의 치료로 시행한 Scarf 절골술 Scarf Osteotomy for the Treatment of Recurrent Hallux Valgus
Short Scarf Osteotomy	Moderate Hallux Valgus (n=12)	Short scarf osteotomy would be an effective surgical procedure for moderate hallux valgus with the benefits of minimized soft tissue dissection and stable fixation	중등도 무지외반증에서 시행한 단축 스퀘프 절골술 Short Scarf Osteotomy for Moderate Hallux Valgus
Chevron Metatarsal Osteotomy	Elderly Hallux Valgus (n=23)	Proximal and distal metatarsal osteotomy treatment yielded good clinical and radiological outcomes in old age hallux valgus patients.	60세 이상의 고령에서의 중족골 절골술을 이용한 무지 외반증 치료 Treatment for Hallux Valgus with Chevron Metatarsal Osteotomy in Patients over 60 Years Old
Parallel-Shaped Modified Scarf Osteotomy	Hallux Valgus Deformity (n=43)	The parallel-shaped modified Scarf osteotomy produces improved AOFAS scores, and effective correction of hallux valgus deformities.	무지 외반증 환자에서 평행 변형 스퀘프 절골술을 이용한 치료 결과 Treatment Results of Hallux Valgus Deformity by Parallel-Shaped Modified Scarf Osteotomy (2012)
Joint Preserving Surgery Using Axial Shortening Metatarsal Osteotomy	Severe Hallux Valgus (n=18)	Axial shortening osteotomy is a useful method to correct the deformity and preserve the metatarsophalangeal joint for severe hallux valgus and claw toe deformity.	류마티스 관절염에 의한 고도의 무지 외반증과 소족지 갈퀴족 변형에 대한 중족골 종축 감압 절골술을 이용한 관절 보존술의 결과 Result of Joint Preserving Surgery Using Axial Shortening Metatarsal Osteotomy for the Treatment of Severe Hallux Valgus and Claw Toes Deformity in Advanced Rheumatoid Arthritis(2012)
Comparison of Proximal and Modified Distal Chevron Osteotomy	Moderate to Severe Hallux Valgus Deformity (n=54)	A modified distal chevron osteotomy and a distal soft tissue procedure are a considerable operative treatment of moderate to severe hallux valgus deformity because of the similar clinical results.	중등도 및 중증의 무지 외반증 환자 치료에 변형된 중족골 원위부 갈매기형 절골술과 근위부 갈매기형 절골술에 대한 비교 Comparison of Proximal and Modified Distal Chevron Osteotomy for the Treatment of Moderate to Severe Hallux Valgus Deformity(2012)
Fixation with Absorbable Suture Material in Akin Osteotomy	Hallux valgus (n=346)	The fixation of the osteotomy site using an absorbable suture material in an Akin osteotomy was effective method and the advantage of this procedure was	흡수성 봉합사를 이용한 무지외반증 Akin 절골술 Fixation with Absorbable Suture Material in Akin Osteotomy(2011)

		unnecessity of the material removal and no skin irritation.	
The Differences of Fixation Method in Proximal Chevron Osteotomy	Moderate and severe degree hallux valgus (n=62)	One cannulated screw fixed group as B. Two cannulated screw fixed group as C; There were significant statistical increase in final mean IMA of group B and C ( $p < 0.05$ ).	The Differences of Fixation Method in Proximal Chevron Osteotomy for Hallux Valgus: K-Wire, Cannulated Screw, Plate (2011)
Proximal reverse chevron metatarsal osteotomy	Severe Hallux Valgus Deformity (n=15)	Proximal reverse chevron metatarsal osteotomy and lateral soft tissue release with additional Akin osteotomy is good treatment option for severe hallux valgus.	고도의 무지 외반증에서 역갈매기형 종족골 절골술 및 Akin 절골술의 치료 Treatment of Severe Hallux Valgus Deformity with Proximal Reverse Chevron Metatarsal Osteotomy and Akin Osteotomy (2010)
Proximal Crescentic Osteotomy	Moderate to Severe Hallux Valgus Deformity (n=55)	Proximal crescentic osteotomy produced satisfactory results for moderate to severe hallux valgus deformity.	Results of the Proximal Crescentic Osteotomy for Moderate to Severe Hallux Valgus Deformity (n=2010)
Proximal crescentic (PCO) and Ludloff osteotomies (LO)	Hallux Valgus (n=2)	This study recommended the PCO rather than LO, when the IMA is needed to correct over 15°.	Comparison of the Contact Area between Three Different Correcting Angles after Proximal Crescentic Osteotomy and Ludloff Osteotomy of the First Metatarsal (Preliminary Report) (2010)
proximal metatarsal osteotomy and distal soft tissue procedure	Hallux Valgus Deformity in Male Patients (n=10)	Proximal metatarsal osteotomy and distal soft tissue procedure showed good results.	남성 무지 외반증 환자에 대한 수술적 치료 Operative Treatment of Hallux Valgus Deformity in Male Patients (2009)
Distal Chevron Metatarsal Osteotomy	Mild to moderate hallux valgus (n=26)	Distal chevron metatarsal osteotomy appears to be safe and satisfactory procedure for mild to moderate hallux valgus.	원위부 종족골 쉼브론 절골술을 이용한 무지 외반증의 치료 Treatment of Hallux Valgus with Distal Chevron Metatarsal Oste (2009)
Distal Chevron Osteotomy	Moderate to Severe Hallux Valgus Deformity in Patients Aged 50 or Older (n=19)	Distal chevron osteotomy is beneficial for patients aged 50 and older with moderate-to-severe hallux valgus deformity	50세 이상 및 중등도 이상 무지 외반증 환자에서의 원위 갈매기형 절골술 Distal Chevron Osteotomy for Moderate to Severe Hallux Valgus Deformity in Patients Aged 50 or Older (2008)
Distal Chevron Osteotomy and Proximal Metatarsal Osteotomy	Moderate severity hallux valgus (n=42)	The proximal metatarsal closing wedge osteotomy for the hallux valgus with moderate severity is better treatment option to achieve better radiographic correction and to prevent loss of correction or recurrence than distal chevron osteotomy.	중등도 무지 외반증 환자에서 원위부 갈매기형 절골술과 종족골 근위부 폐쇄성 뼈기 절골술의 치료 결과 비교 Comparison of the Results between Distal Chevron Osteotomy and Proximal Metatarsal Osteotomy for the Treatment of Moderate Hallux Valgus (2008)

Modified Scarf Osteotomy	Hallux valgus with lesser metatarsalgia (n=19)	Modified scarf osteotomy would be an effective surgical procedure, especially, for achieving downward displacement and supination of the first metatarsal head in hallux valgus with lesser metatarsalgia.	소족지 중족골통을 동반한 무지 외반증에서의 변형 스카프 절골술 Modified Scarf Osteotomy for Hallux Valgus with Lesser Metatarsalgia (2008)
K-wires and Bold screw for fixing the proximal metatarsal chevron osteotomy	Moderate and severe degree hallux valgus (n=59)	There were no statistical differences in radiologic and clinical results ( $p>0.05$ ) but, group (Bold screw fixed group) exceeded group (K-wires fixed group) in VAS score ( $p=0.0007$ ).	무지 외반증의 근위 갈매기형 절골술 후 고정 방법에 따른 결과 차이 The Differences between Fixation Devices for Proximal Chevron Osteotomy in Hallux Valgus Surgery (2008)
Comparison of Proximal Metatarsal Osteotomy and Distal Chevron Osteotomy	Hallux valgus (n=43)	Proximal metatarsal osteotomy was more proper operative technique than distal chevron osteotomy in severe group, because of superiority of correction in radiological parameters.	무지외반증 치료에서 근위 중족골 절골술과 원위 갈매기형 절골술의 비교 Comparison of Proximal Metatarsal Osteotomy and Distal Chevron Osteotomy for Correction of Hallux Valgus (2008)
Derotational Closing Wedge Akin Osteotomy, after the metatarsal osteotomy	Hallux valgus (n=87)	Derotational closing wedge Akin osteotomy provides that it can correct the hallux primus valgus angle and hallux pronational rotatory angle also and it can be a helpful method for minimizing the recurrence rate of the hallux valgus deformity.	무지의 회내 변형을 동반한 무지 외반증에서 폐쇄적 회외감염 Akin 절골술의 효과 The Effect of Derotational Closing Wedge Akin Osteotomy for the Treatment of Hallux Valgus with the Pronation of Great Toe (2008)
Ludloff osteotomy	Moderate to Severe Hallux Valgus Deformity (n=33)	Ludloff osteotomy produced satisfactory results for moderate to severe hallux valgus deformity	중증도 이상의 무지 외반증에서 Ludloff 절골술의 결과 Results of the Ludloff Osteotomy for Moderate to Severe Hallux Valgus Deformity (2007)