

PATIENT INFORMATION / ARTICLES & EDUCATION

Hallux Rigidus

Causes, Diagnosis and Modern Treatment Options

DIMITRIOS BALTZIS

Specialist in Orthopaedics and Trauma Surgery

Senior Consultant, KMG Klinikum Luckenwalde

Head of the Foot and Ankle Centre Teltow-Fläming

What is hallux rigidus?

Hallux rigidus is osteoarthritis of the first metatarsophalangeal joint. Progressive cartilage wear may cause pain, osteophytes and reduced movement of the big toe.

Typical symptoms

Pain and stiffness at the base of the big toe, shoe pressure, reduced dorsiflexion and difficulty pushing off when walking. More severe disease can cause pain even at rest.

Diagnosis

Clinical assessment covers symptoms, joint motion, painful areas and foot alignment. Weight-bearing radiographs may reveal joint-space narrowing, osteophytes and changes in the bone beneath the cartilage.

Non-surgical treatment

Roomy shoes, stiff or rocker-bottom soles, suitable orthoses or a Morton's extension, activity modification, tailored physiotherapy and anti-inflammatory pain relief when medically appropriate. Injections may relieve symptoms temporarily but do not reverse arthritis.

Surgical treatment

For early-stage dorsal impingement, cheilectomy, sometimes combined with a Moberg osteotomy, may help. In advanced painful osteoarthritis, first MTP joint fusion is a well-established choice. The fused joint no longer bends, but the procedure aims to reduce pain and improve function. Implants are an option only in selected cases.

Radiographic examples / Röntgenbeispiele



Fig. 1 · Preoperative radiograph



Fig. 2 · Postoperative radiograph – Arthrodesis of 1st MTP joint

Recovery and risks

Rehabilitation depends on the procedure. Guided movement may start early after cheilectomy, while fusion requires bone-healing protection, a special shoe and follow-up. Risks include infection, wound problems, nerve irritation, thrombosis, persistent symptoms and, after fusion, non-union or hardware irritation.

References

BOFAS Hyperbook: Hallux Rigidus. · Royal National Orthopaedic Hospital: Patient Guide to Hallux Rigidus. · Royal College of Podiatry: Hallux Rigidus.