



Department of Health Research Ministry of Health and Family Welfare, Government of India



Standard Treatment Workflow (STW) HIP OSTEOARTHRITIS

ICD-10-M16.9

	SYMPTOMS & SIGNS	PRIMARY
25	Pain	· Very rare
SW F	• During or after movement	SECONDARY
	 Joint stiffness Tenderness Loss of flexibility & restricted range 	 Developmental dysplasia of hip Osteonecrosis Failed reconstruction Post-traumatic
	of hip movementGrating sensation	 Tuberculosis Coxa plana (Legg-Calvé-Perthes disease) Slipped capital femoral epiphysis
	• Deformity	• Paget's disease • Hemophilia

MANAGEMENT

CONSERVATIVE MEASURES

- Weight loss
- Non-opioid analgesics (as per need)
- Reasonable activity modification
- Avoid standing for long hours, climbing stairs, squatting, sitting cross legged
- Hip abductor and extensor muscle strengthening exercises and quadriceps exercises
- Ambulatory aids like walking stick

KELLGREN (1963) DESCRIBED 4 GRADES OF HIP OA

- Grade 1 (doubtful OA), Possible narrowing of the joint space medially and possible osteophytes around femoral head
- Grade 2 (mild OA), Definite narrowing of the joint space inferiorly, definite osteophytes and slight sclerosis
- Grade 3 (moderate OA), Marked narrowing of the joint space, slight osteophytes, some sclerosis and cyst formation, and deformity of the femoral head and acetabulum
- Grade 4 (severe OA), Gross loss of joint space with sclerosis and cysts, marked deformity of the femoral head and acetabulum, and large osteophytes

INDICATIONS OF TOTAL HIP REPLACEMENT (THR)

- · Patients with osteoarthritis of hip, Kellgren & Lawrence Grade-IV with following clinical features may require surgery after appropriate conservative treatment has failed
- Deformity & pain that significantly limits the activities of daily living
- Disabling hip pains that continues even at rest
- Daily requirements of analgesic
- Bilateral ankylosis of hip joints



ABBREVIATIONS

OA: Osteoarthritis

THR: Total Hip Replacement

REFERENCES

- 1. Sinusas K. Osteoarthritis: diagnosis and treatment. Am Fam Physician. 2012 Jan 1;85(1):49-56. Erratum in: Am Fam Physician. 2012 Nov 15;86(10):893. PMID: 22230308.
- 2. Krauss I, Steinhilber B, Haupt G, Miller R, Grau S, Janssen P. Efficacy of conservative treatment regimes for hip osteoarthritis--evaluation of the therapeutic exercise regime "Hip School": a protocol for a randomised, controlled trial. BMC Musculoskelet Disord. 2011 Nov 24;12:270. doi: 10.1186/1471-2474-12-270. PMID: 22114973; PMCID: PMC3252289.
- 3. Kumar P, Sen RK, Aggarwal S, Jindal K. Common hip conditions requiring primary total hip arthroplasty and comparison of their post-operative functional outcomes. J Clin Orthop Trauma. 2020 Mar;11(Suppl 2):S192-S195. doi: 10.1016/j.jcot.2019.02.009. Epub 2019 Feb 10. PMID: 32189938; PMCID: PMC7067986.
- 4. Gandhi R, Perruccio AV, Mahomed NN. Surgical management of hip osteoarthritis. CMAJ. 2014 Mar 18;186(5):347-55. doi: 10.1503/cmaj.121584. Epub 2013 Oct 21. PMID: 24144604; PMCID: PMC3956563.

KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the website of ICMR for more information: (icmr.gov.in) for more information. ©Indian Council of Medical Research, Ministry of Health & Family Welfare, Government of India.