

LATERAL APPROACH

HARDINGE THOMINE

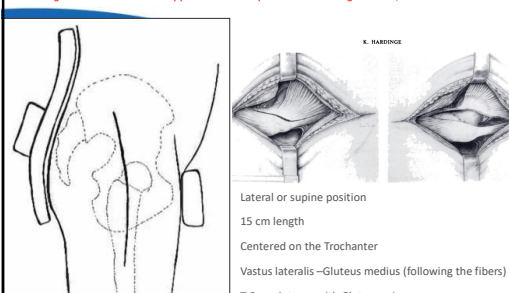
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Orthopaedica Belgica Instructional Course
 Saturday 19 November 2022
 Back to Basics - The Lower Extremity

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LATERAL APPROACH - HARDINGE

Hardinge K. The direct lateral approach to the hip. J Bone Joint Surg Br. 1982;64:17-9.

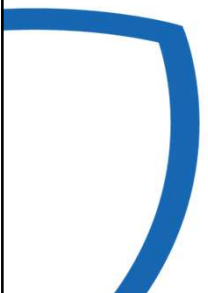



Kevin Hardinge was a graduate of Liverpool University (MRCS LRCP 1962), and took a masters degree in orthopaedic surgery in 1969. Appointments at Liverpool hospitals and at Wrightington hospital.

Lateral or supine position
 15 cm length
 Centered on the Trochanter
 Vastus lateralis – Gluteus medius (following the fibers)
 T Capsulotomy with Gluteus minor

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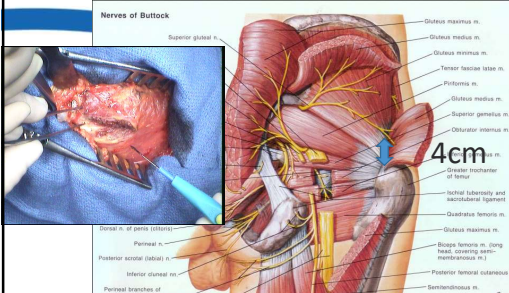
LATERAL APPROACH - HARDINGE

Anterior dislocation
 Closure of both planes
 ❖ resorbable/unresorbable
 ❖ through trochanteric bone
 Postoperatively:
 2 crutches – 1 month
 1 crutch – 1 month

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LATERAL APPROACH - HARDINGE



Nerves of Buttock

Superior gluteal n.
 Inferior gluteal n.
 Sciatic n.

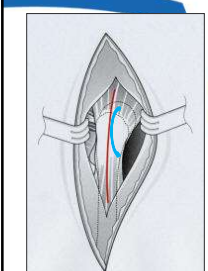
Gluteus maximus m.
 Gluteus medius m.
 Gluteus minimus m.
 Tensor fasciae latae m.
 Piriformis m.
 Gluteus medius m.
 Superior gemellus m.
 Obturator internus m.
 Greater trochanter of femur
 Iliotibial band and sacrotuberous ligament
 Quadratus femoris m.
 Gluteus maximus m.
 Biceps femoris m. long head, covering semitendinosus m.
 Posterior femoral cutaneous n.
 Semitendinosus m.

4cm
 Superior gluteal nerve!
 4 cm proximal

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LATERAL APPROACH – HARDINGE-THOMINE

Thomine JM, Duparc F, Dujardin F, Biga N. Transgluteal approach to the hip by anterior hemiomyotomy of the gluteus medius. Rev Chir Orthop Reparatrice Appar Mot. 1999;85:520-5.



COMPLICATIONS

This approach was found to give excellent visualization of the proximal femur and acetabulum and was found to have comparable operative time, blood loss, time to ambulation, and range of motion to other approaches. The **postoperative dislocation rate was very low (2.5%)** and redisllocations have not occurred. The incidence of **heterotopic ossification was high (61%)** and this may limit the use of this approach in some cases.

Foster DE, Hunter JR. The direct lateral approach to the hip for arthroplasty. Advantages and complications. Orthopedics. 1987;10:274-80.

Jean Michel Thomine (1934-2014)
 CHU Rouen
 President of GEM/SFCM


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LATERAL APPROACH – HARDINGE-THOMINE


Limping ?

Postoperative limping impacts patient satisfaction after THA. The association varied by degree of limping and absence or presence of pain. It was independent of surgical approach. 5 years after THA occurrence of limping was largely reduced after both a lateral and an anterior approach, with low evidence of a greater reduction under an anterior approach.

Bonnefoy-Mazure A, Poncet A, Gonzalez A, Barea C, Hannouche D, Lübbeke A. Limping and patient satisfaction after primary total hip arthroplasty: a registry-based cohort study. Acta Orthop. 2022;93:602-608.



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LATERAL APPROACH – HARDINGE-THOMINE 

choice of approach for hip hemiarthroplasty in geriatric patients significantly influence early postoperative outcomes?

Despite early postoperative differences, postoperative mobility does not seem to be greatly influenced by the choice of either an anterior modified Smith-Petersen or a lateral Hardinge approach for hip hemiarthroplasty. Operative time was significantly linked to postoperative complications. In this respect, it can be concluded that it is not be the approach itself that determines the early postoperative result, but the routine the individual surgeon has with it.

Auffarth A et al. A randomized-controlled trial comparing the modified Smith-Petersen and Hardinge approaches. J Trauma. 2011 ;70:1257-62.

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LATERAL APPROACH – HARDINGE-THOMINE 

Comparison of direct anterior, lateral, posterior and posterior-2 approaches in total hip arthroplasty: network meta-analysis.

Results of SUCRA indicated anterior and lateral approaches were the first and second ranks for postoperative HHS and VAS score, while posterior and lateral approaches were the first and second ranks for postoperative complications. We recommended using lateral approach that has an acceptable postoperative pain, function and complications (second rank for all outcomes) as a surgical technique for THA.

Putananon C, Tuchinda H, Arirachakaran A, Wongsak S, Narinsorasak T, Kongtharvanskul J. Comparison of direct anterior, lateral, posterior and posterior-2 approaches in total hip arthroplasty: network meta-analysis. Eur J Orthop Surg Traumatol. 2018;28:255-267.

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LATERAL APPROACH – HARDINGE-THOMINE 

National Guideline Centre (UK). Evidence review for hip replacement approach

“Over the last decade total hip replacements have been performed using 2 main approaches: The posterior approach and the anterolateral (Hardinge) approach.”

“The committee agreed the evidence **did not indicate the superiority of any single approach.**”

National Guideline Centre (UK). Evidence review for hip replacement approach: Joint replacement (primary): hip, knee and shoulder: Evidence review M. London: National Institute for Health and Care Excellence (NICE); 2020 Jun. PMID: 32881466.

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