AUDITORIUM

10.30 – 12.00 SIMPOSIO 1: LE VIE DI ACCESSO NELLE PROTESI PRIMARIE
Moderatori: **Vincenzo Salini** (Milano), **Giovanni Zatti** (Monza)
Anchorman: **Francesco Benazzo** (Pavia)

10.30 – 11.05 LE OPINIONI E I DETTAGLI TECNICI: COME E PERCHÉ
Via anteriore diretta - **Dante Dallari** (Bologna)
Via antero laterale - **Roberto Civinini** (Firenze)
Via postero laterale - **Giandomenico Logroscino** (L'Aquila)

10.30 – 10.36 Set-up: letto chirurgico , posizione del paziente e supporti
Dante Dallari (2'),
Roberto Civinini (2'),
Giandomenico Logroscino (2')

10.36 – 10.42 Esposizione acetabolare : circonferenziale o buco della serratura?
Dante Dallari (2'),
Roberto Civinini (2'),
Giandomenico Logroscino (2')

10.42 – 10.51 Esposizione femore prossimale: risparmio trocanterico e abduttori, accesso e preparazione canale midollare
Dante Dallari (3'),
Roberto Civinini (3'),
Giandomenico Logroscino (3')

10.51 – 10.57 Verifica intraoperatoria lunghezza e offset
Dante Dallari (2'),
Roberto Civinini (2'),
Giandomenico Logroscino (2')

10.57 – 10.59 Amplificatore di brillanza: no, sì e come
Dante Dallari (30"),
Roberto Civinini (30"),
Giandomenico Logroscino (30")

10.59 – 11.02 Sutura capsulare (no,sì e come)
Dante Dallari (1'),
Roberto Civinini (1'),
Giandomenico Logroscino (1')

11.02 – 11.05 Regime e restrizioni post operatorie immediate (no, sì e quali)
Dante Dallari (1'),
Roberto Civinini (1'),
Giandomenico Logroscino (1')

GIOVEDÌ 19 SETTEMBRE 2019

11.05 – 11.12 La via laterale diretta: è ancora attuale?
Filippo Casella (Roma)

11.12 – 11.35 Discussione

FATTI, IPOTESI E ILLUSIONI

11.35 – 11.45 L'informazione al paziente: chi, come
Luigi Zagra (Milano)

11.45 – 11.55 La letteratura e i registri: sopravvivenza, complicanze e risultati a medio lungo termine
Emilio Romanini (Roma)

11.55 – 12.00 Fate quello che fate bene... ma fatelo molto bene
Francesco Benazzo (Pavia)

LE VIE DI ACCESSO NELLE PROTESI PRIMARIE
LE OPINIONI E I DETTAGLI TECNICI: COME E PERCHÉ

VIA ANTERIORE: D. Dallari

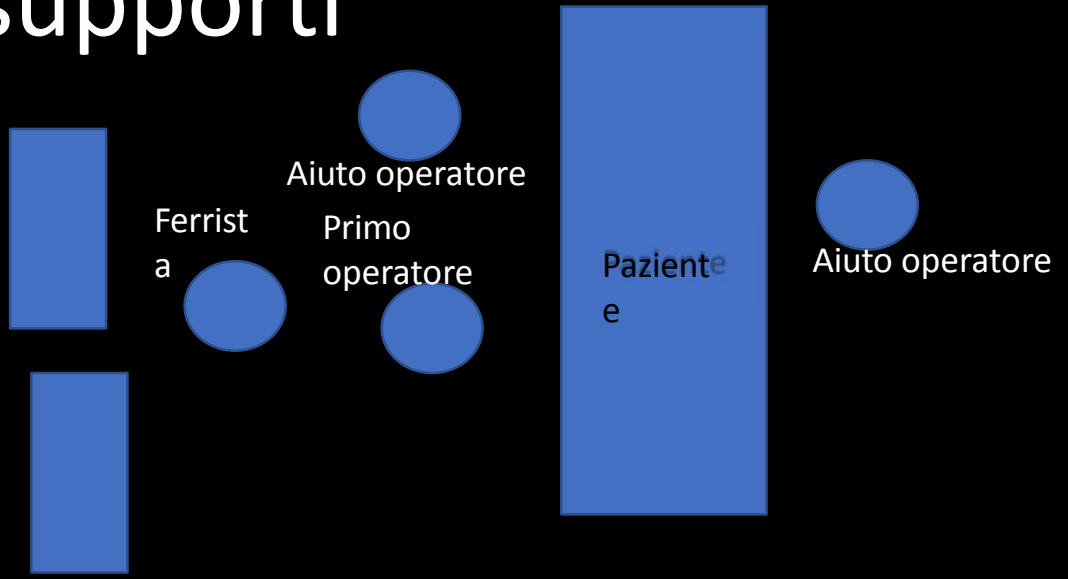
VIA ANTERO LATERALE: R. Civinini

VIA POSTERO LATERALE: G. Logroscino

Set-up: Letto chirurgico, posizione del paziente e supporti

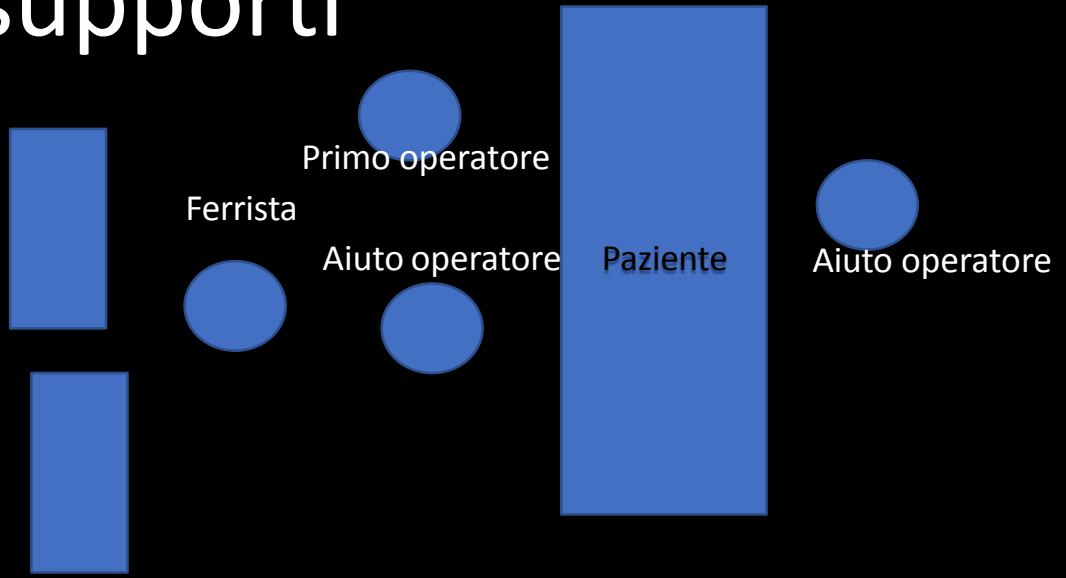
Set-up: Letto chirurgico, posizione del paziente e supporti

Set-up: Letto chirurgico, posizione del paziente e supporti



TEMPO ACETABOLARE

Set-up: Letto chirurgico, posizione del paziente e supporti



TEMPO FEMORALE

Set-up: Letto chirurgico, posizione del paziente e supporti

Set-up: Letto chirurgico, posizione del paziente e supporti

Set-up: Letto chirurgico, posizione del paziente e supporti

Set-up: Letto chirurgico, posizione del paziente e supporti

Revie

w

J Am Acad Orthop Surg. 2014 Sep;22(9):595-603. doi: 10.5435/JAAOS-22-09-595.

Direct anterior approach for total hip arthroplasty: indications, technique, and results.

Post ZD, Orozco F, Diaz-Ledezma C, Hozack WJ, Ong A.

L'uso di strumentari dedicati e letto da trazione determina una più veloce Learning curve, anche se risulta più difficile la valutazione intraoperatoria di offset e dismetria

J Orthop Surg Res. 2019 Jul 16;14(1):218. doi: 10.1186/s13018-019-1272-0.

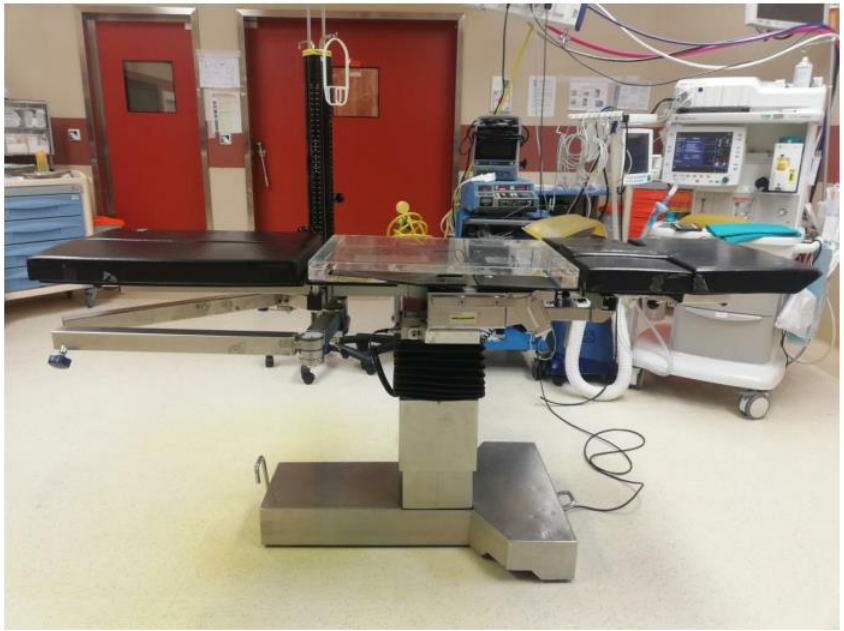
Adopting the direct anterior approach: experience and learning curve in a Chinese patient population.

Kong X[1], Grau L[2], Ong A[2], Yang C[3], Chai W[4].

RESULTS: There was a significant decrease in the complication rate from 44% in the first 50 cases to 16% in the second 50.

Via Antero-laterale:

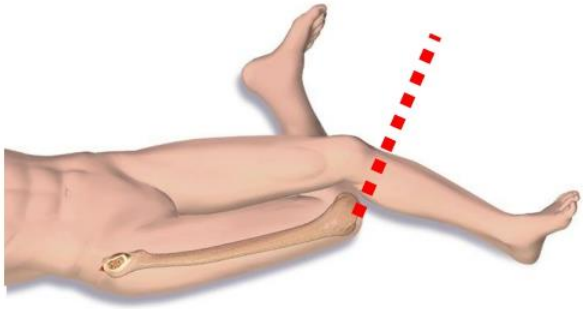
Letto chirurgico



La via antero-laterale viene eseguita con un letto operatorio standard

Via Antero-laterale:

Posizione del paziente



Paziente in posizione supina.
Ambedue gli arti inferiori vengono preparati sterili

Via Antero-laterale:

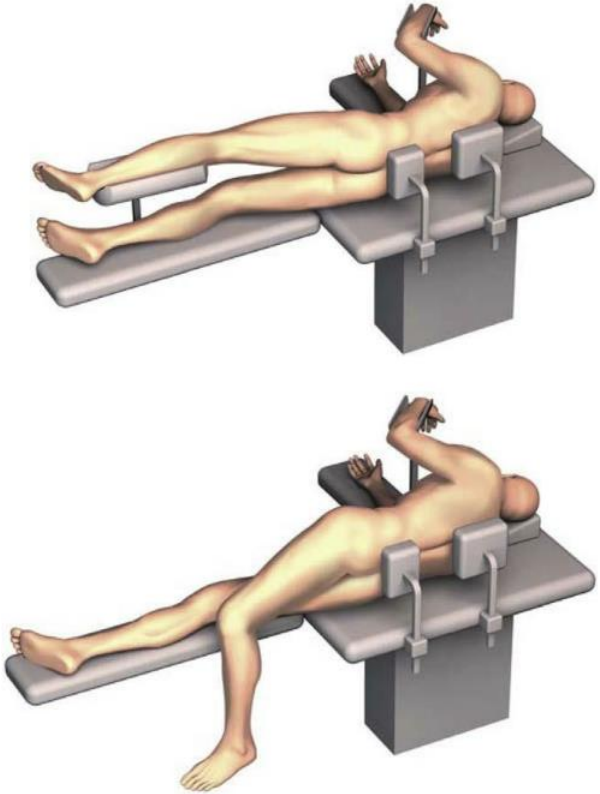
Supporti

Un supporto alla base del letto viene incluso nel campo operatorio

Via Antero-laterale:

Posizione del paziente

Paziente in decubito laterale.



Posiziondo l'arto durante la preparazione femorale in estensione, adduzione e 90° di extra-rotazione.

LA VIA POSTERO LATERALE

SET-UP:

Letto chirurgico, Posizione del paziente e Supporti

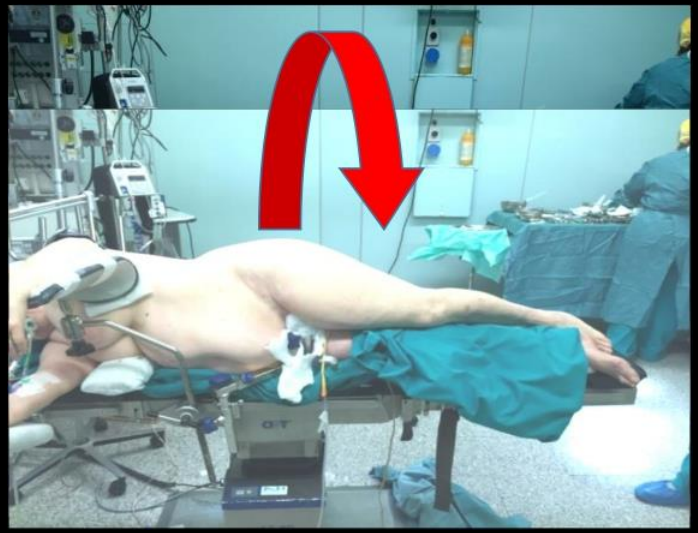
Giandomenico Logroscino

Chirurgia Mininvasiva e Computer Assistita
Università dell'Aquila, Ospedale San Salvatore Asl 1 Abruzzo
Direttore: Prof. V. Calvisi



ALTRE OPZIONI

Pressore Anteriore Singolo (Pubico)



ATTENZIONE!

Pazienti Obesi

Cosa Dice La Letteratura…….

The Journal of Arthroplasty 33 (2018) 3496–3501

Contents lists available at ScienceDirect

The Journal of Arthroplasty

journal homepage: www.arthroplastyjournal.org

Primary Arthroplasty

Variability of Pelvic Orientation in the Lateral Decubitus Position: Are External Alignment Guides Trustworthy?

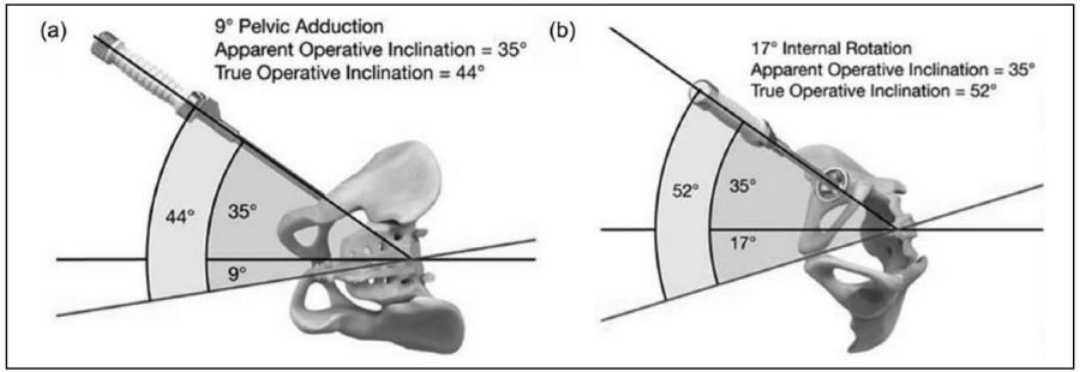
Jesse E. Otero, MD, PhD [a, b, *], Keith A. Fehring, MD [a], John R. Martin, MD [a], Susan M. Odum, PhD [a], Thomas K. Fehring, MD [a]

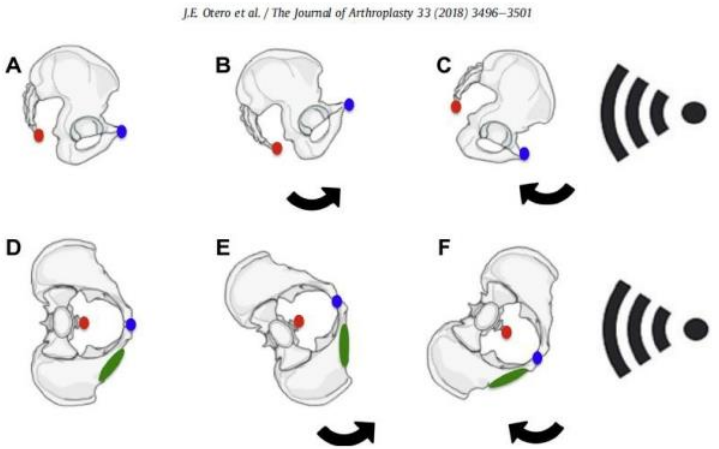
[a] OrthoCarolina, Hip and Knee Center, Charlotte, NC
[b] Department of Orthopaedics and Rehabilitation, The University of Iowa Hospitals and Clinics, Iowa City, IA

38% of patients in the lateral decubitus position were malpositioned in tilt, rotation, or both

INCLINATO VERSO I PIEDI =COTILE VERTICALE

APPANCIATO=COTILE VERTICALE E RETROVERSO (>10°)





Rutherford, Hip International 2019

Original research article

HIP International

HIP International
2019, Vol. 29(1) 89–95

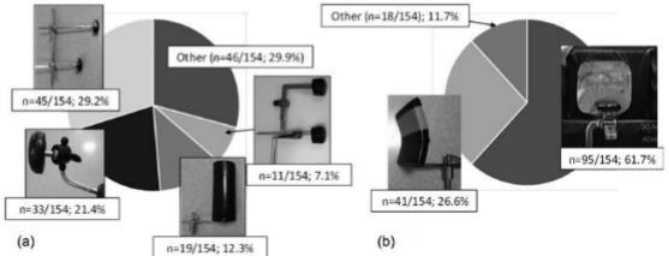
DOI: 10.1177/1120700018760818
journals.sagepub.com/home/hpi
SAGE

Patient positioning and cup orientation during total hip arthroplasty: assessment of current UK practice

Megan Rutherford[1], John D O'Connor[1], Janet C Hill[2], David E Beverland[2], Alex B Lennon[1] and Nicholas J Dunne[3–7]

44% of orthopaedic surgeons in the UK used 2 anterior superior iliac spine supports

Grammatopoulos et al *(Bone Joint J. 2014)*
demonstrated that the use of 2 anterior superior iliac spine supports
reduced intraoperative pelvic movement when compared to a single anterior superior iliac spine brace arm



Esposizione acetabolare: circonferenziale o buco della serratura?

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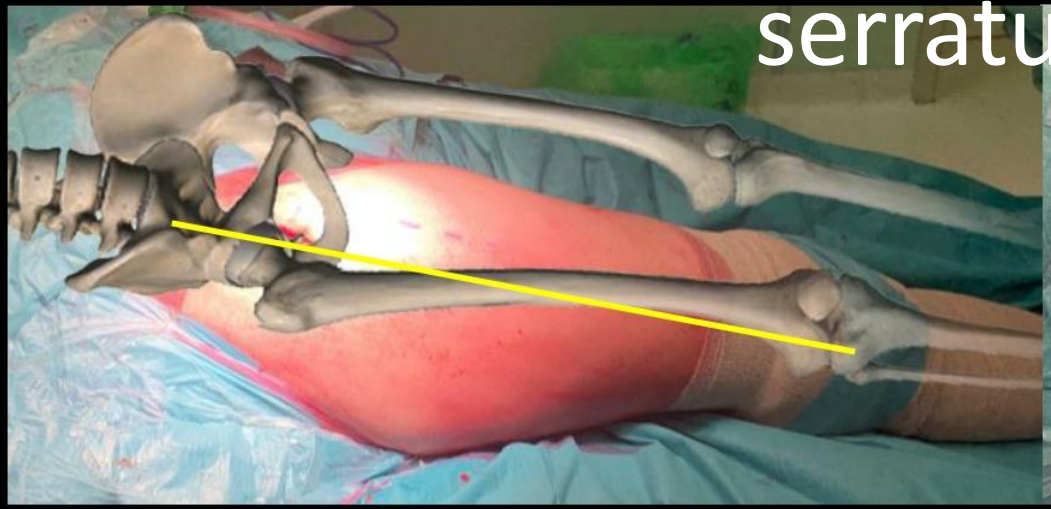
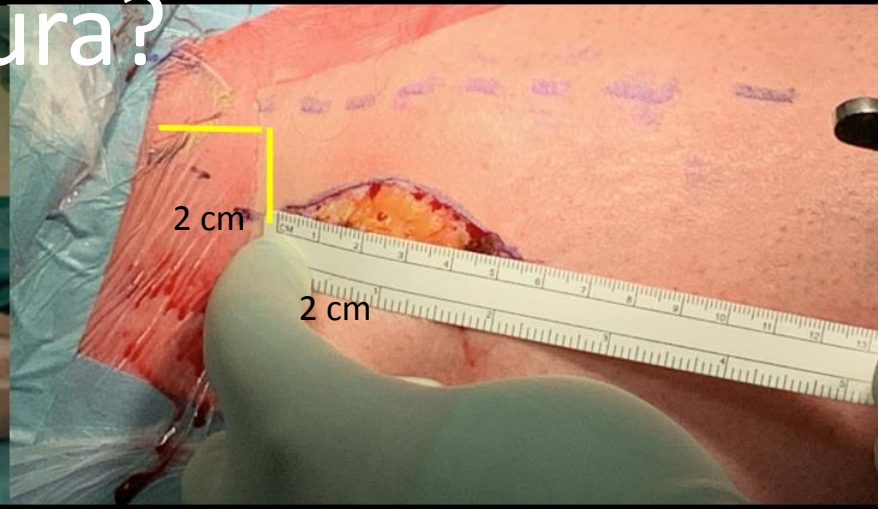
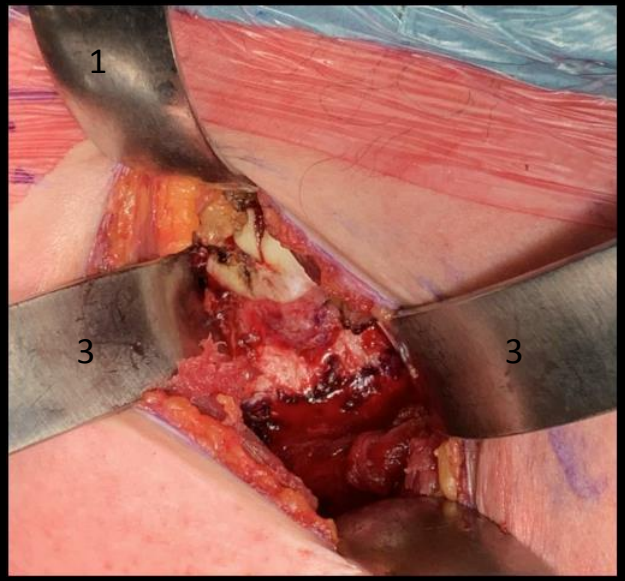


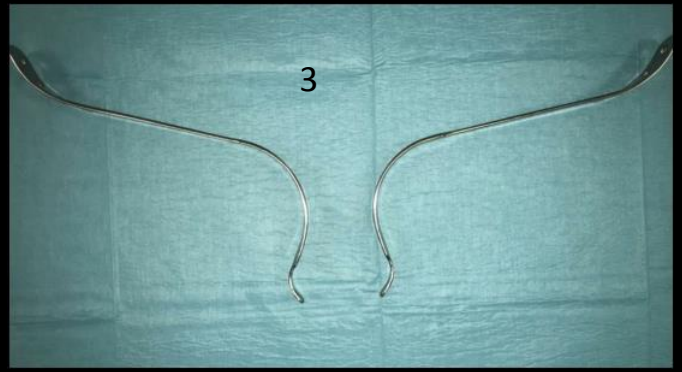


Esposizione acetabolare: circonferenziale o buco della serratura?

Esposizione acetabolare: circonferenziale o buco della serratura?

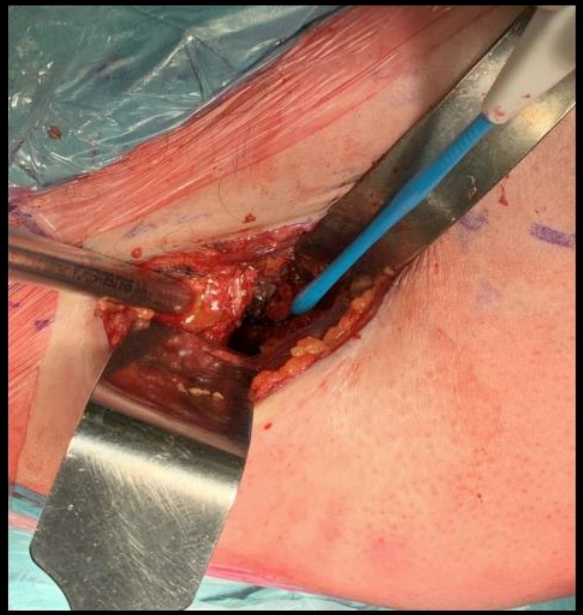
PEARLS AND PITFALLS





Esposizione acetabolare: circonferenziale o buco della serratura?

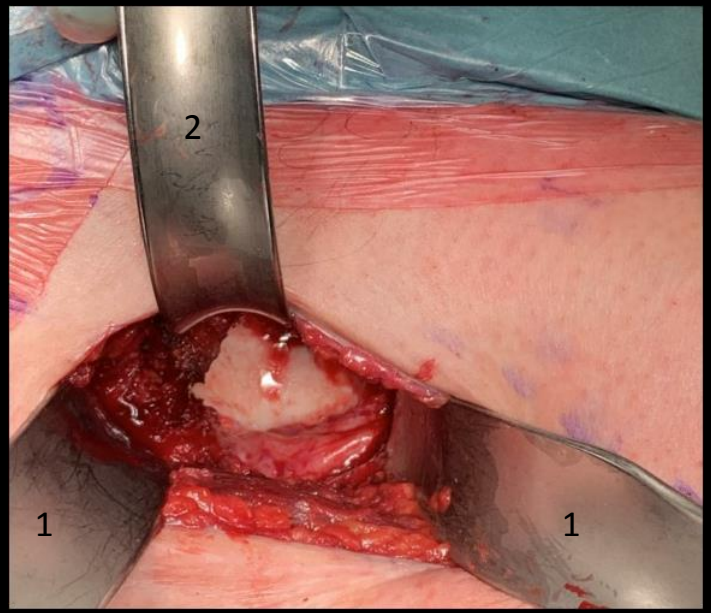
PEARLS AND PITFALLS



1- RIMOVERE LE LEVE E MANTENERE SOLO SPATOLA AD ANCA PER PROTEGGERE VENTRE MUSCOLARE DEL TENSORE FASCIA LATA, DURANTE LA RIMOZIONE DELLA TESTA FEMORALE

2- ESEGUIRE RELEASE CAPSULARE POSTERIORE, PER FACILITARE LA RIMOZIONE

Esposizione acetabolare: circonferenziale o buco della serratura?

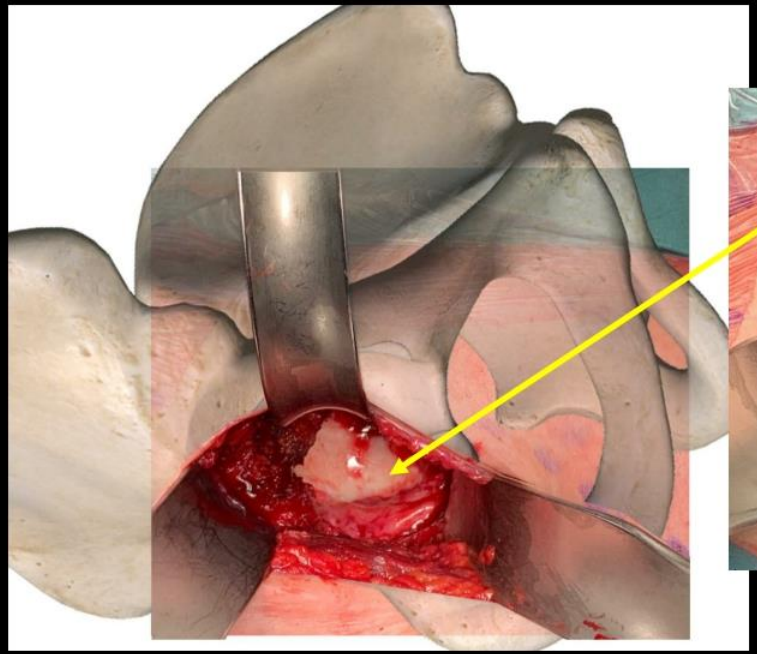


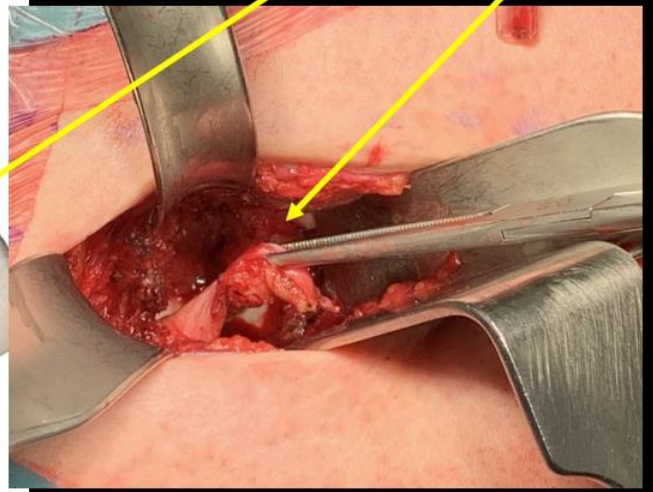
Esposizione acetabolare: circonferenziale o buco della serratura?

PEARLS AND PITFALLS

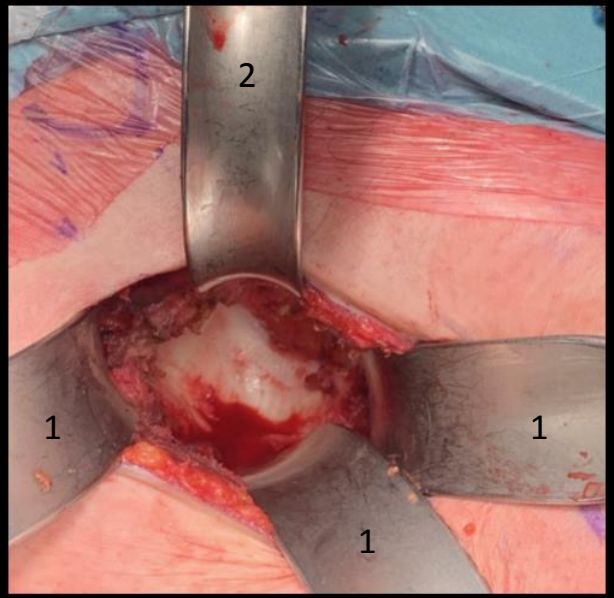
Rimozione legamento orbicolare e labrum

residuo





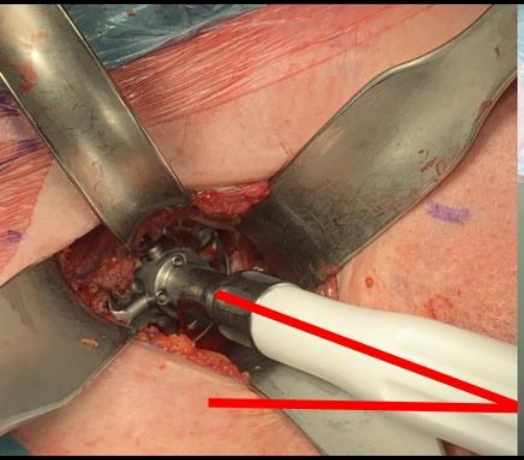
Esposizione acetabolare: circonferenziale o buco della serratura?

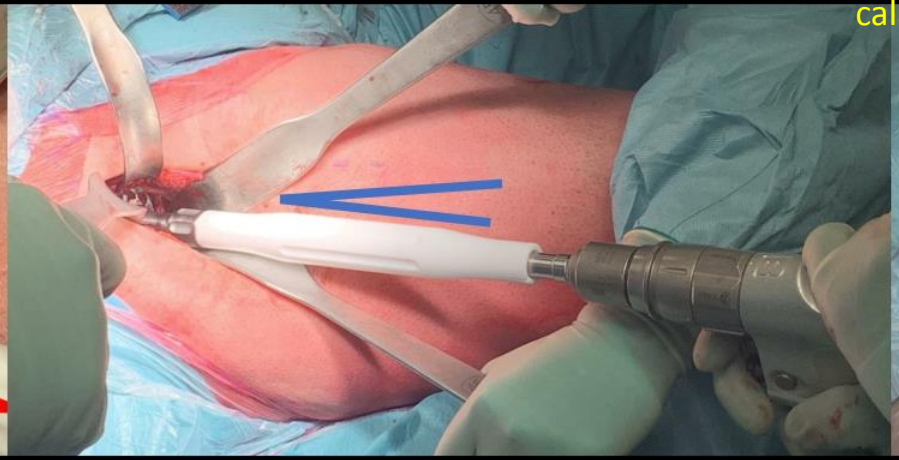


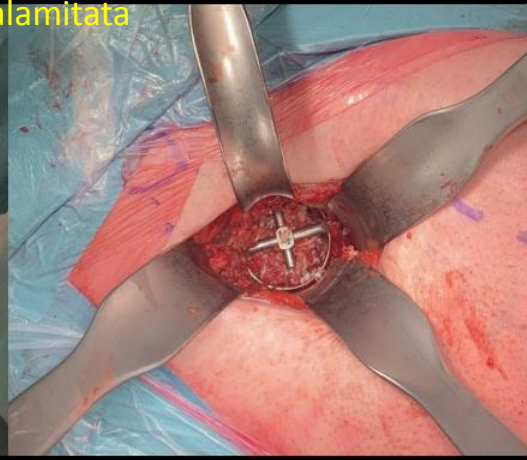
Esposizione acetabolare: circonferenziale o buco della serratura?

PEARLS AND PITFALLS

Fresa calamitata

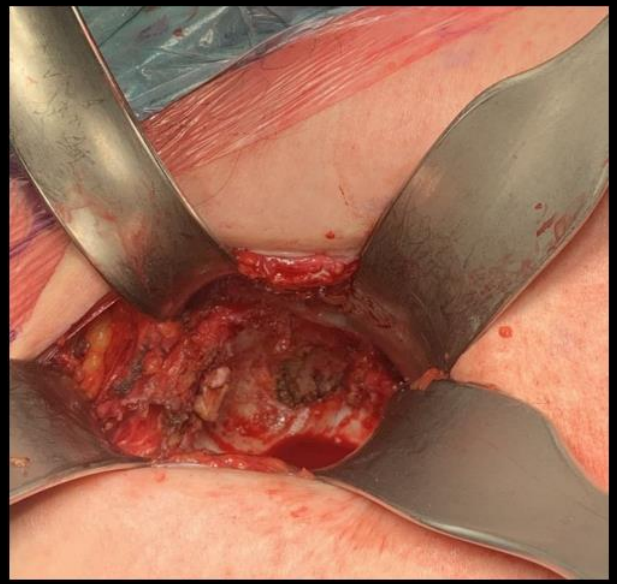


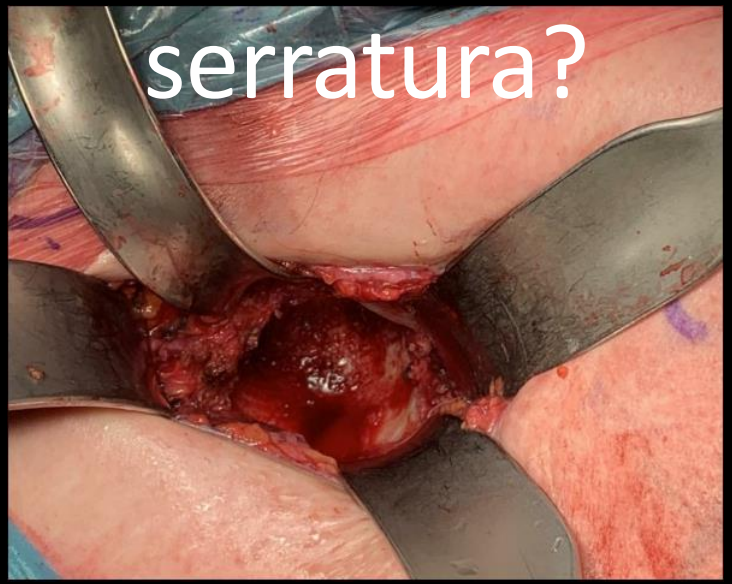


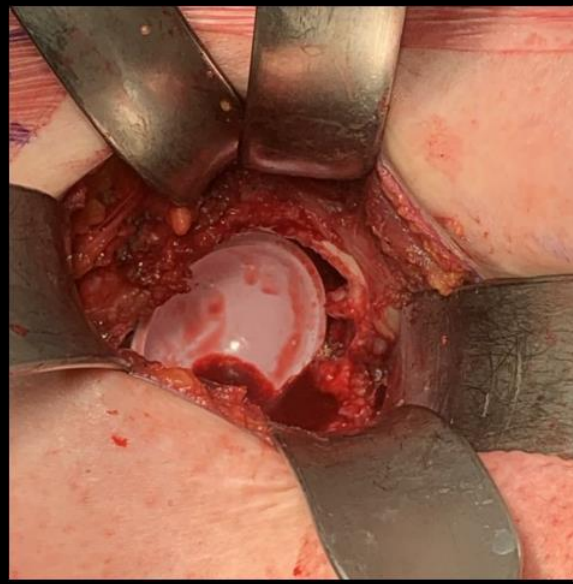


Landmark: legamento trasverso

Esposizione acetabolare: circonferenziale o buco della serratura?







Esposizione acetabolare: circonferenziale o buco della serratura?

Review

J Bone Joint Surg Am. 2016 Sep 7;98(17):e72. doi: 10.2106/JBJS.15.01080.

Surgeons' Accuracy in Achieving Their Desired Acetabular Component Orientation.

Grammatopoulos G[1], Alvand A[2], Monk AP[2], Mellon S[3], Pandit H[2], Rees J[2], Gill HS[4], Murray DW[2].

Author information

1 Nuffield Orthopaedic Centre, Oxford, United Kingdom Nuffield Department of Orthopaedics, Rheumatology & Musculoskeletal Sciences, Headington, Oxford, United Kingdom george.grammatopoulos@ndorms.ox.ac.uk.

2 Nuffield Orthopaedic Centre, Oxford, United Kingdom Nuffield Department of Orthopaedics, Rheumatology & Musculoskeletal Sciences, Headington, Oxford, United Kingdom.

3 Nuffield Department of Orthopaedics, Rheumatology & Musculoskeletal Sciences, Headington, Oxford, United Kingdom.

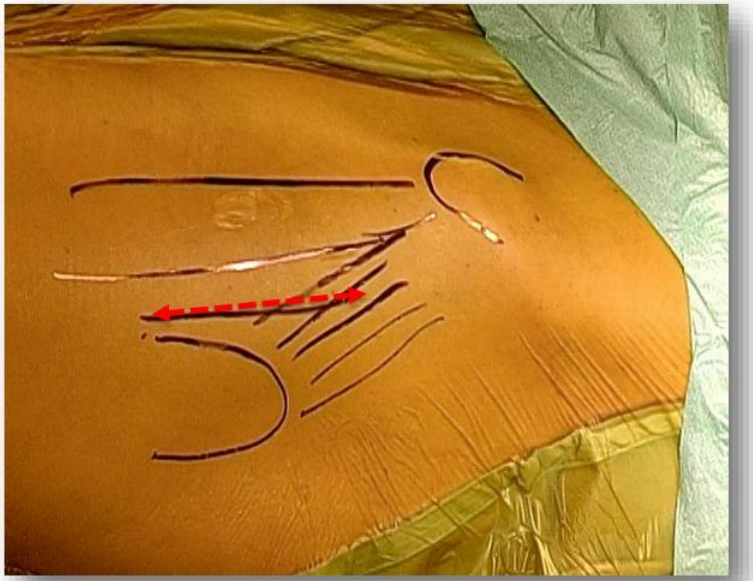
4 Department of Mechanical Engineering, University of Bath, Bath, United Kingdom.

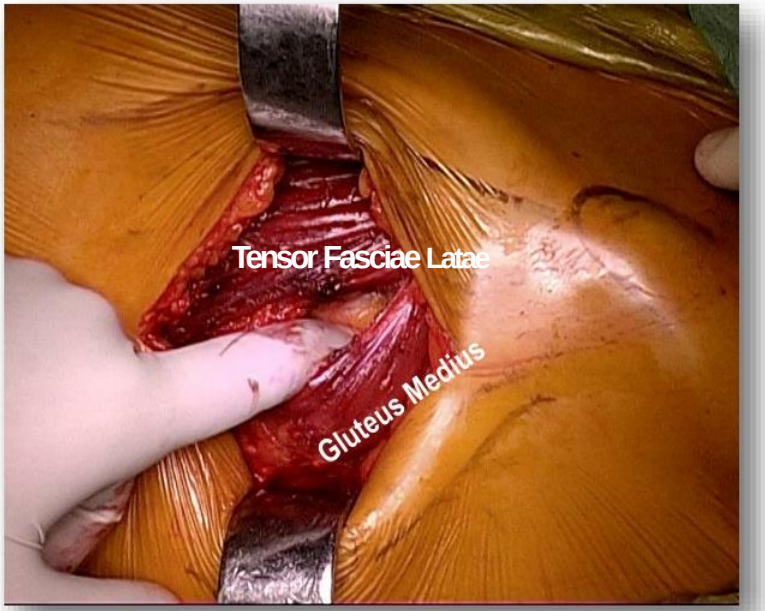
L'esperienza del chirurgo è il principale fattore di influenza del posizionamento della coppa acetabolare in ogni approccio e setting utilizzato

CONCLUSIONS: Surgeons overestimate operative inclination and anteversion, which is of benefit, as this, on average, helps to achieve the desired radiographic cup orientation. Although the use of visual cues helps, conventional techniques result in a large variability in acetabular component orientation. New and better guides and methods for training need to be developed.

Via Antero-laterale:

Esposizione del cotile

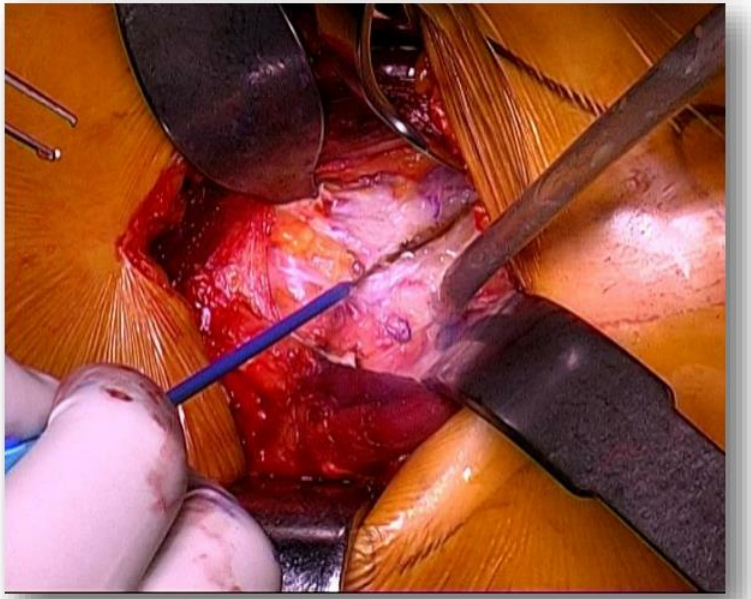




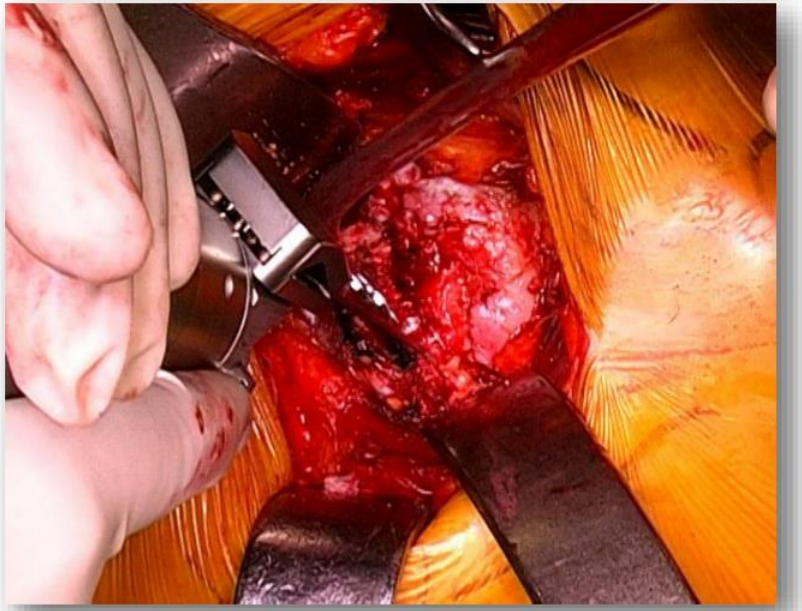
Per via smussa si identifica l'intervallo fra tensore e medio gluteo.

Via Antero-laterale:

Esposizione del cotile



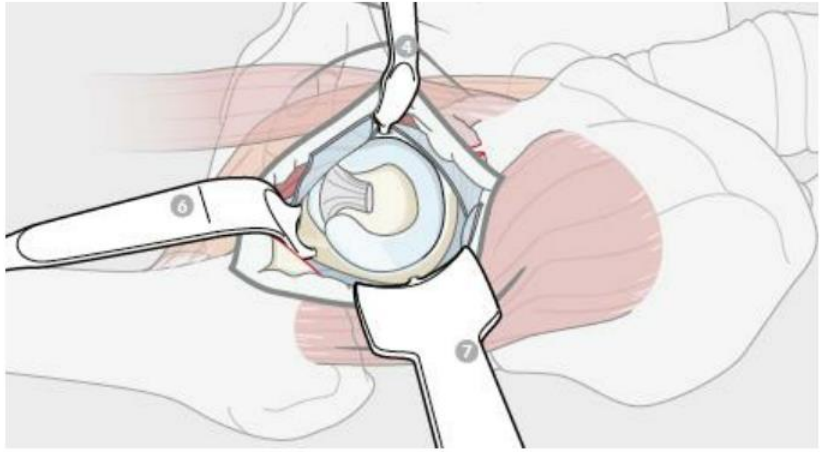
Incisione a T della capsula e capsuletomia anteriore



Si esegue quindi l'osteotomia in situ della testa per evitare di danneggiare il medio gluteo

Via Antero-laterale:

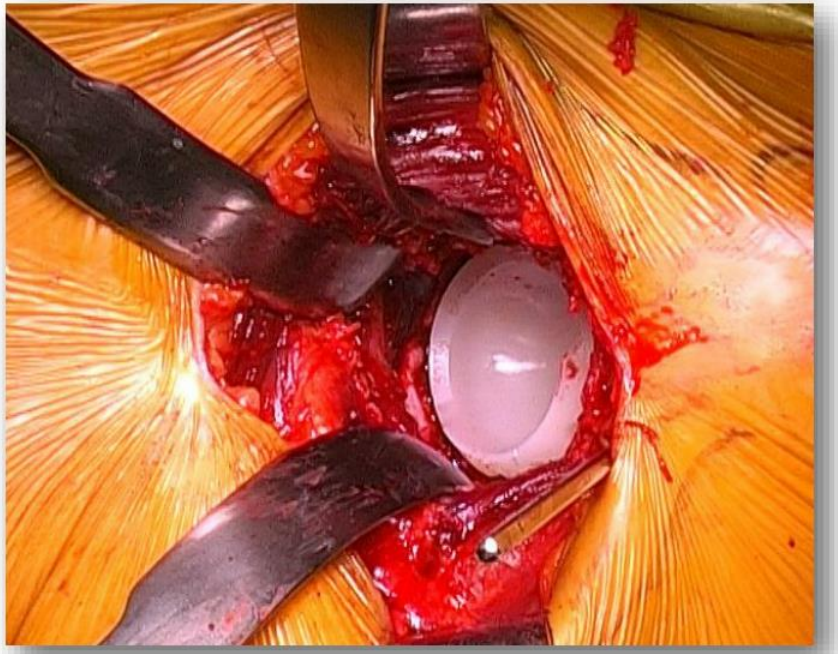
Esposizione del cotile



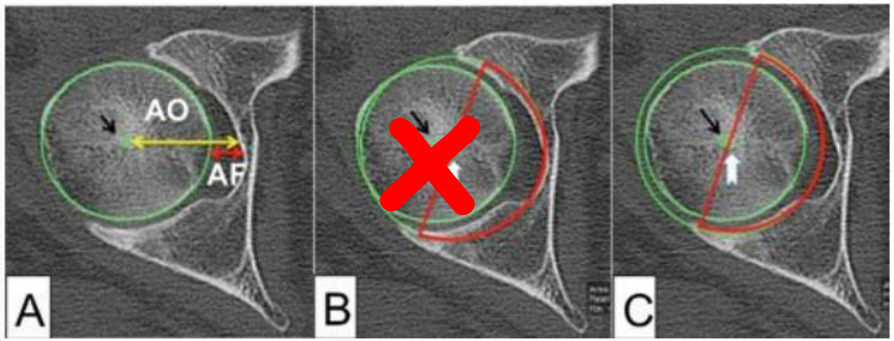
Esposizione circonferenziale del cotile

Via Antero-laterale:

Esposizione del cotile



impingement



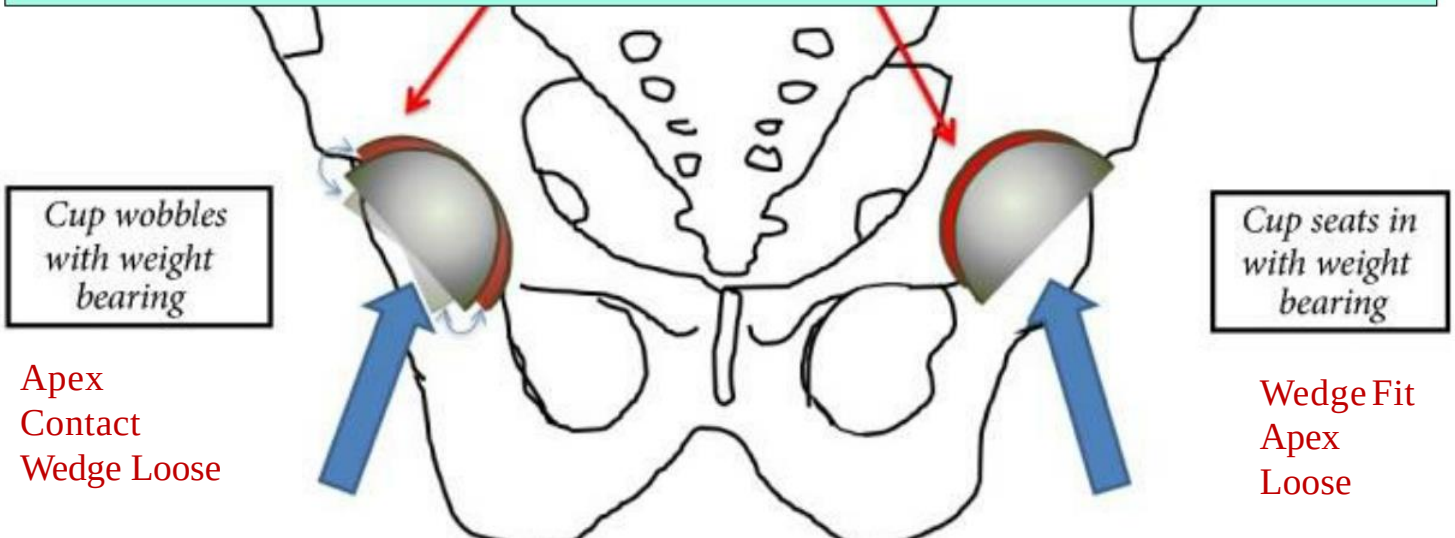
This technique:

- Limit the displacement of the CRH
- Improves Hip Range of Motion
- Decreases the risk of bony

- Allow better bone quality

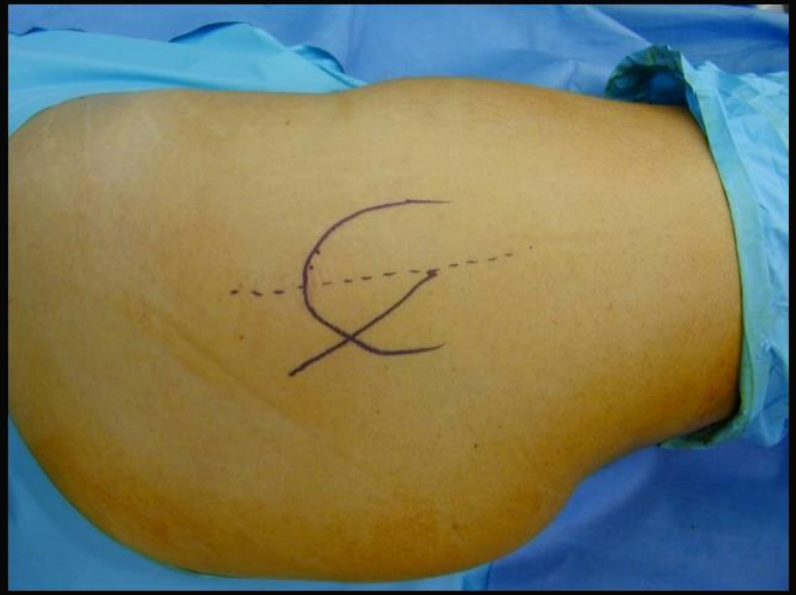
LA VIA POSTERO LATERALE

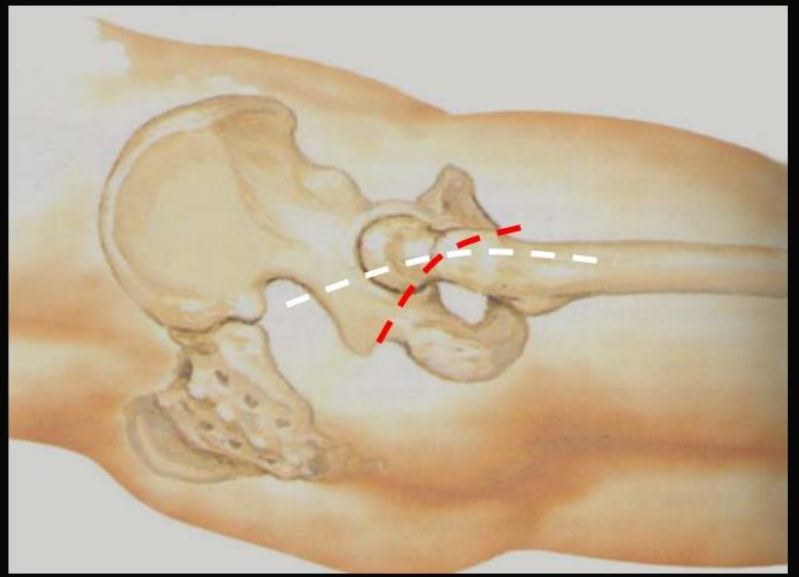
ESPOSIZIONE ACETABOLARE :
Circonferenziale o Buco della serratura?

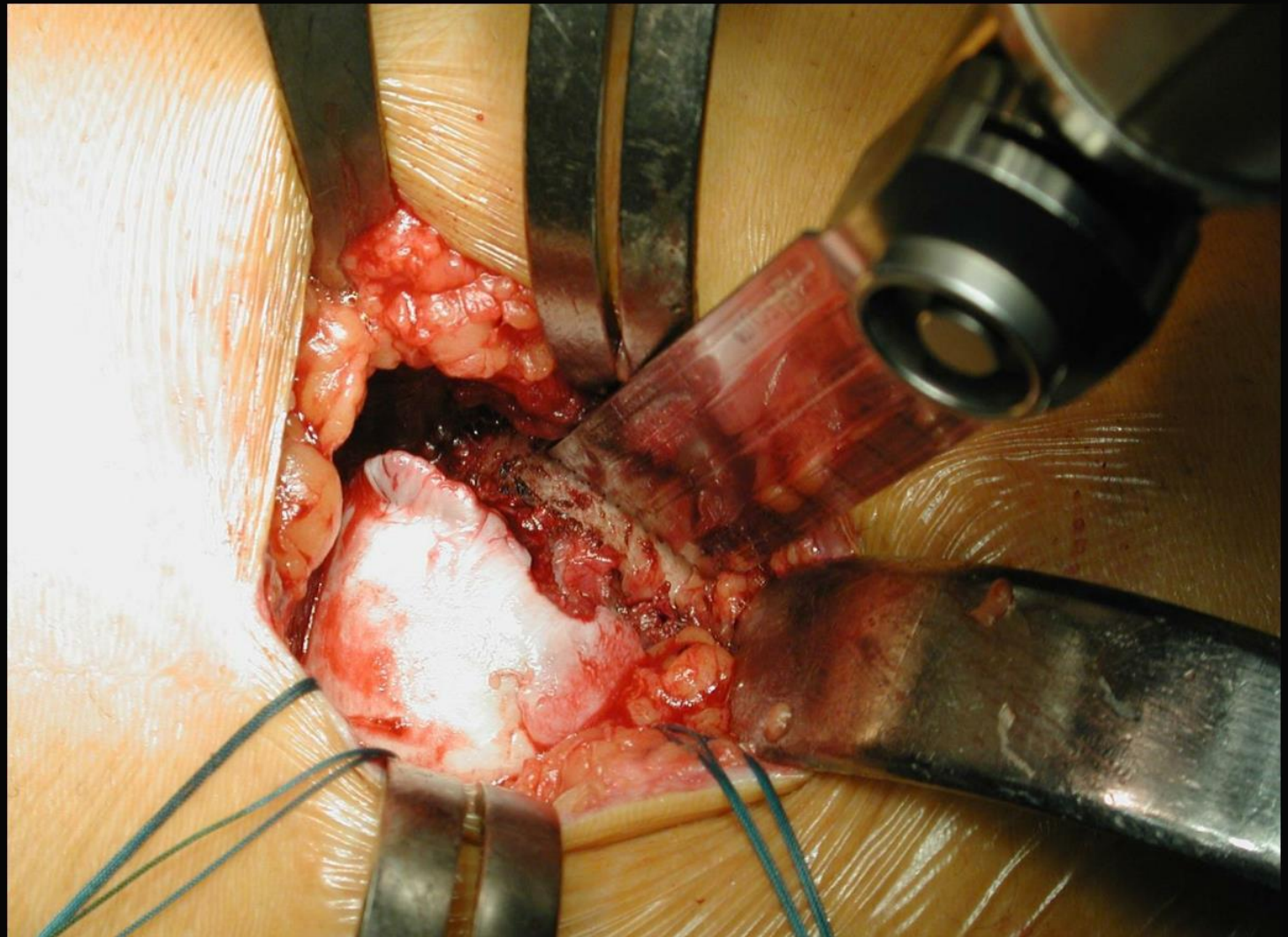


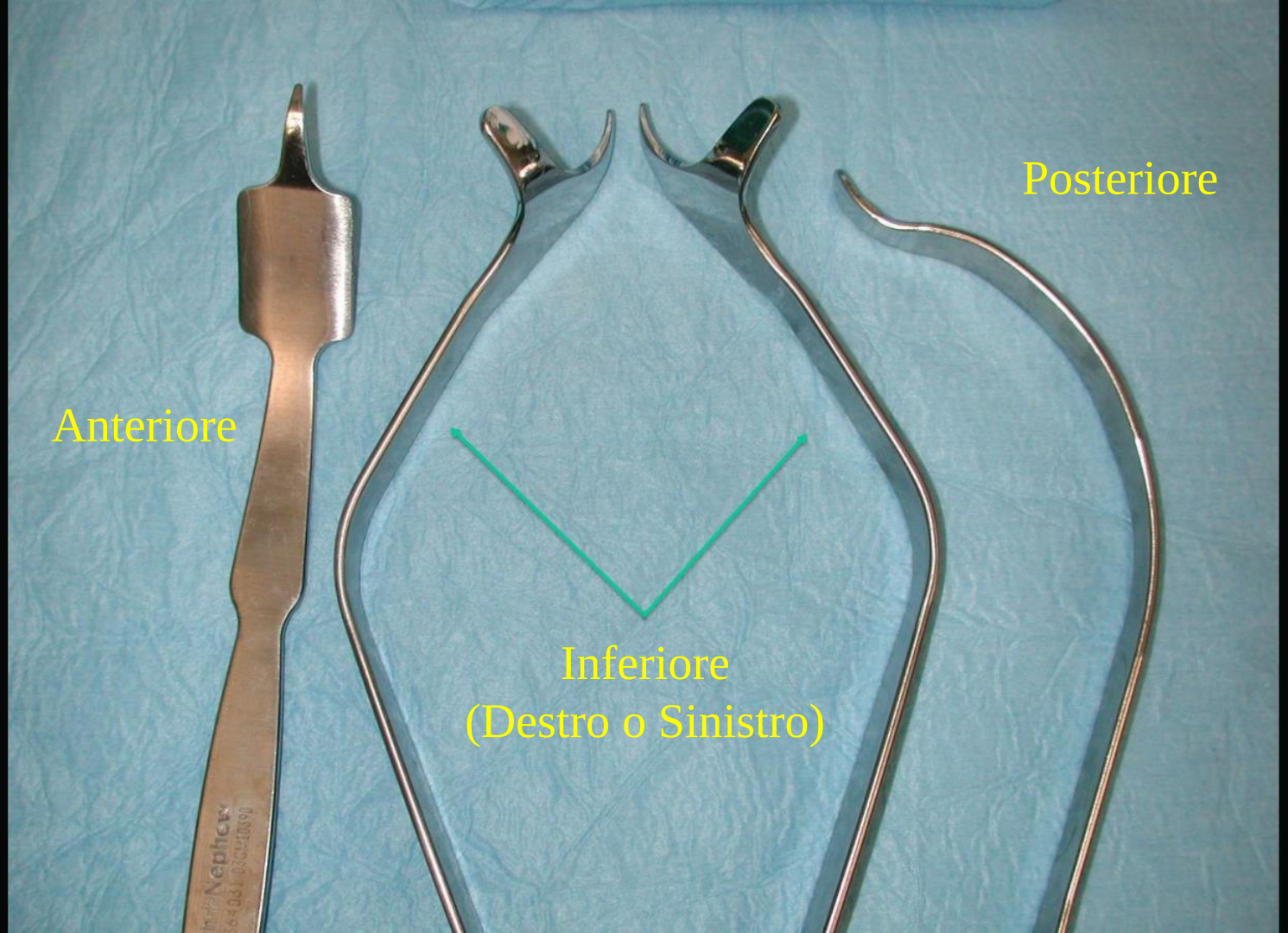
Apex
Contact
Wedge Loose

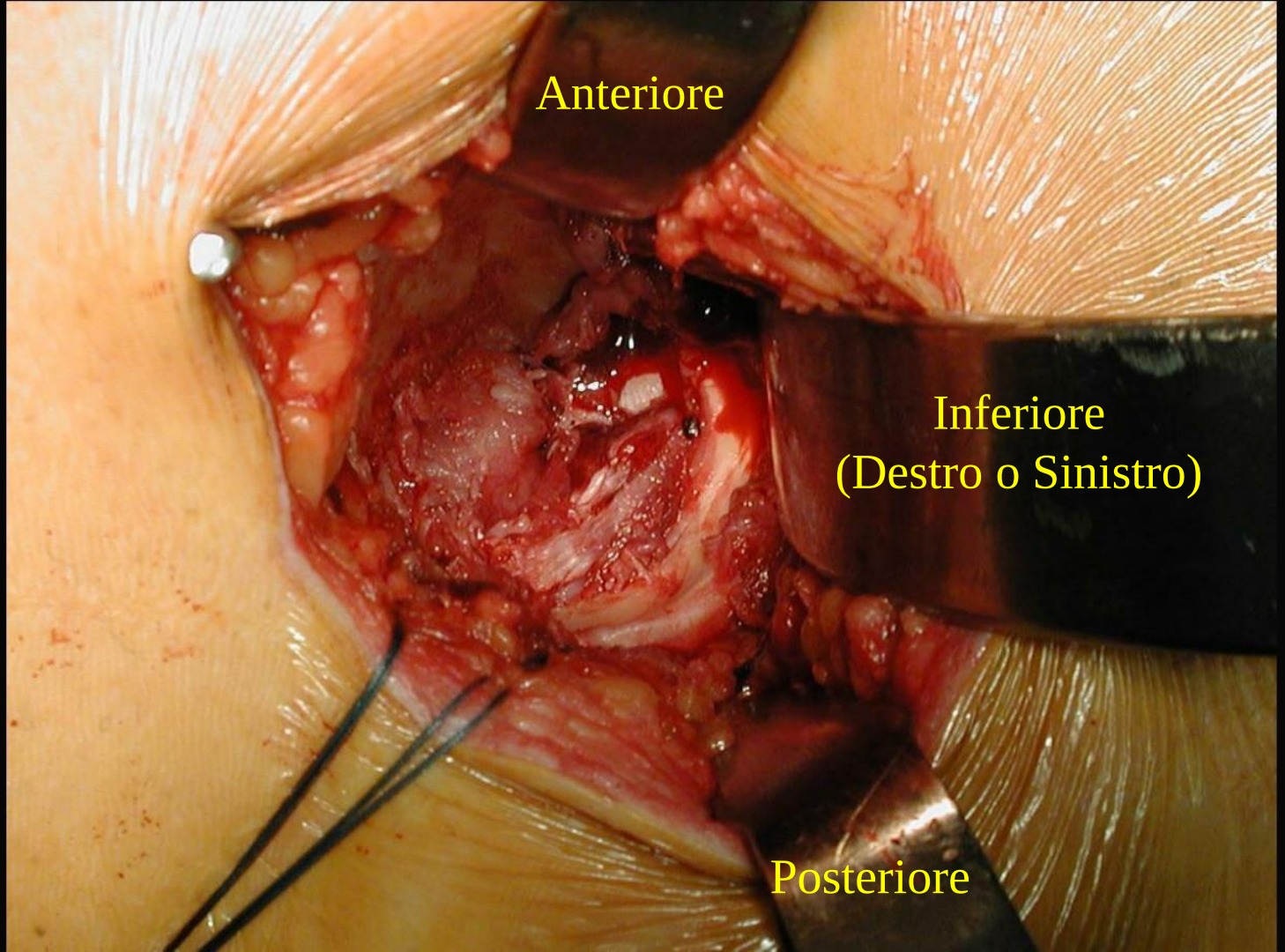
Wedge Fit
Apex
Loose





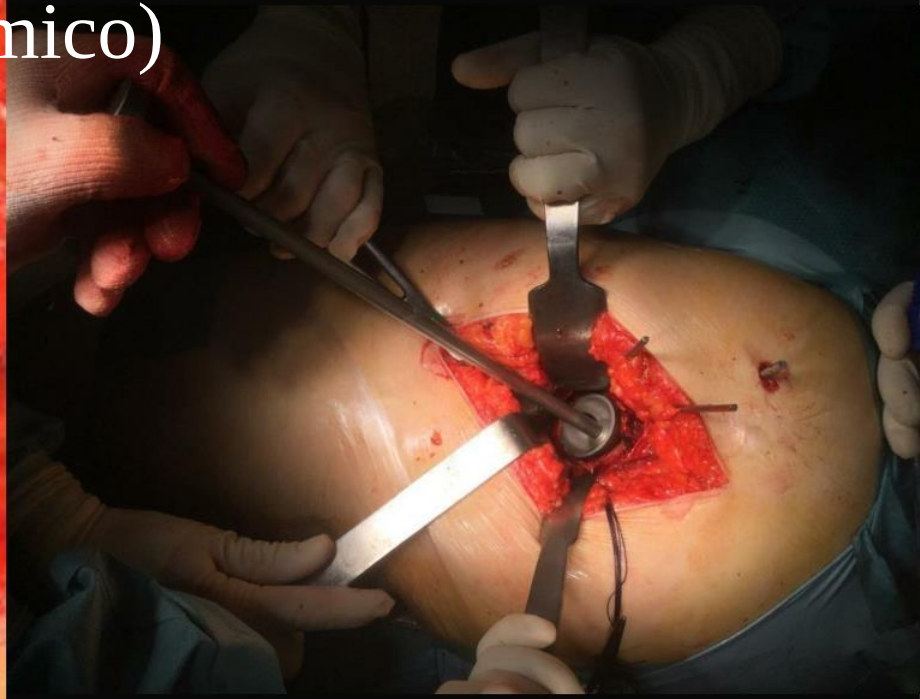



Posteriore
Anteriore
Inferiore
(Destro o Sinistro)


Anteriore
Inferiore
(Destro o Sinistro)
Posteriore

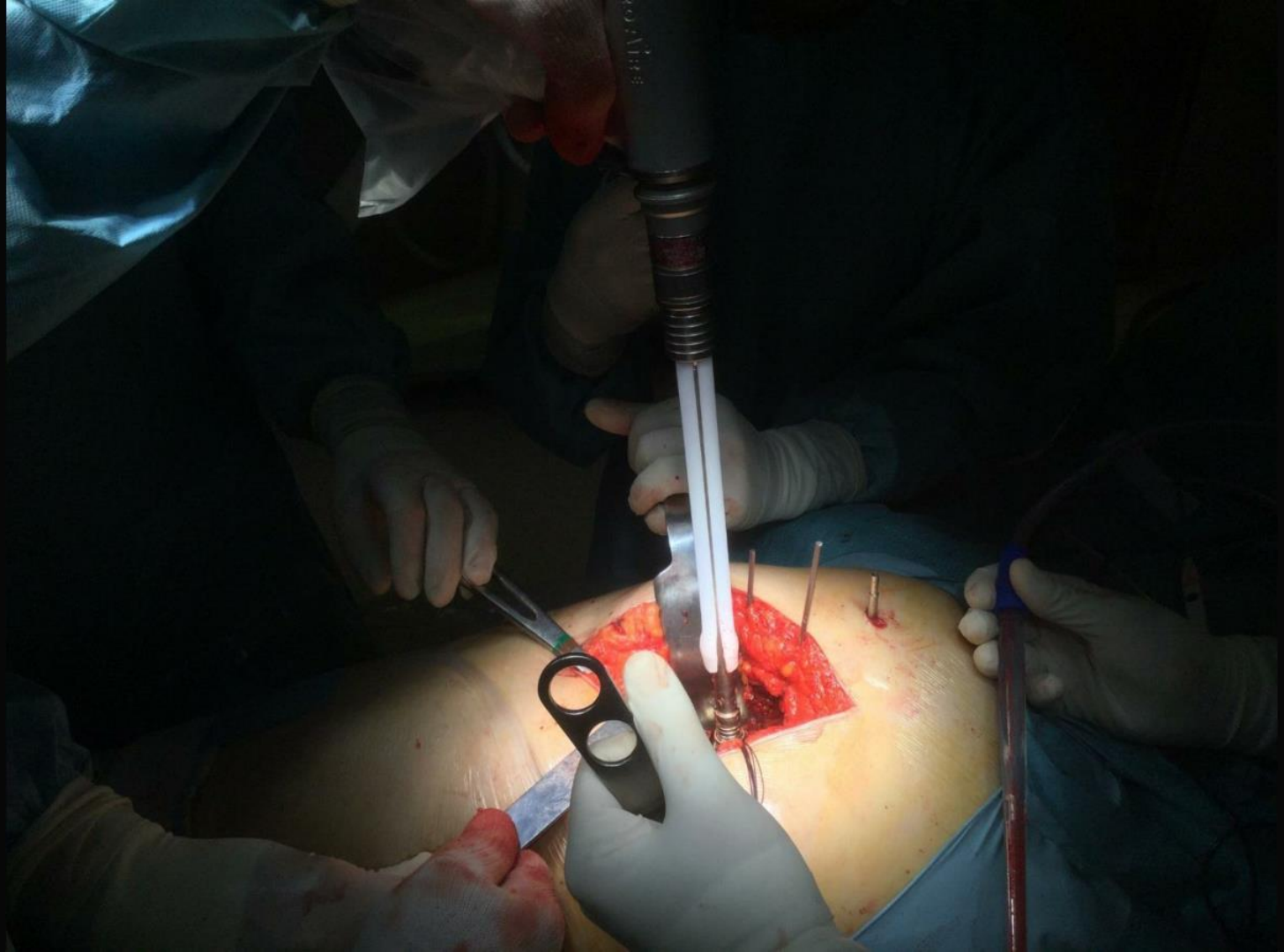
Reaming Periferico

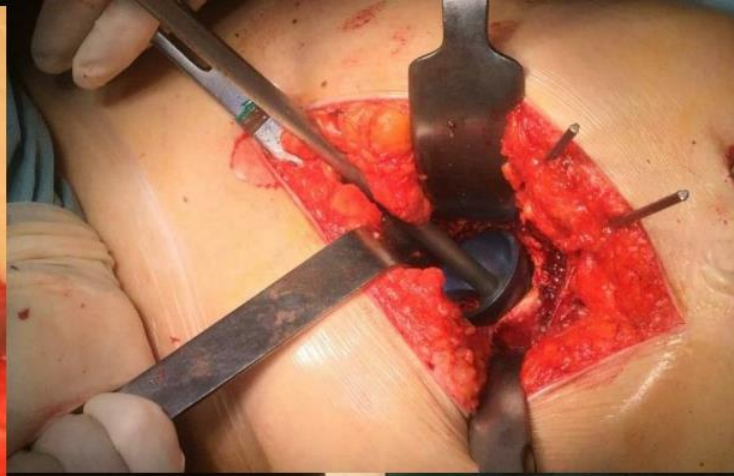
(Anatomico)

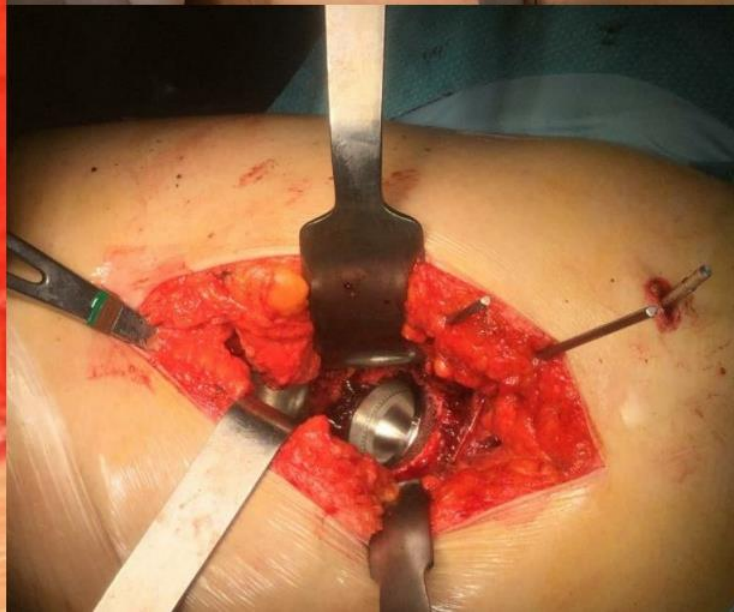


Reaming concentrico

(Acetabular Floor)







Cosa Dice La Letteratura…….

THE BONE & JOINT JOURNAL

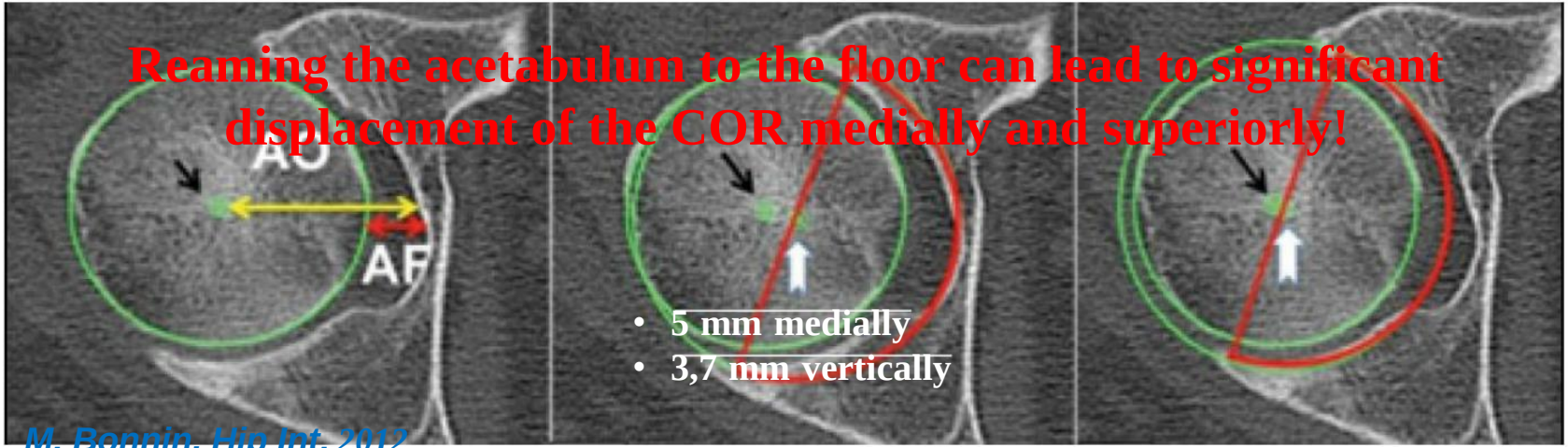
■ HIP

Restoration of the centre of rotation in primary total hip arthroplasty

THE INFLUENCE OF ACETABULAR FLOOR DEPTH AND REAMING TECHNIQUE

G. Meermans, Bone Joint J 2016

Reaming the acetabulum to the floor can lead to significant displacement of the COR medially and superiorly!



- 5 mm medially
- 3,7 mm vertically

M. Bonnin, Hip Int. 2012

The Journal of Arthroplasty 34 (2019) 1808–1814

Contents lists available at ScienceDirect

The Journal of Arthroplasty

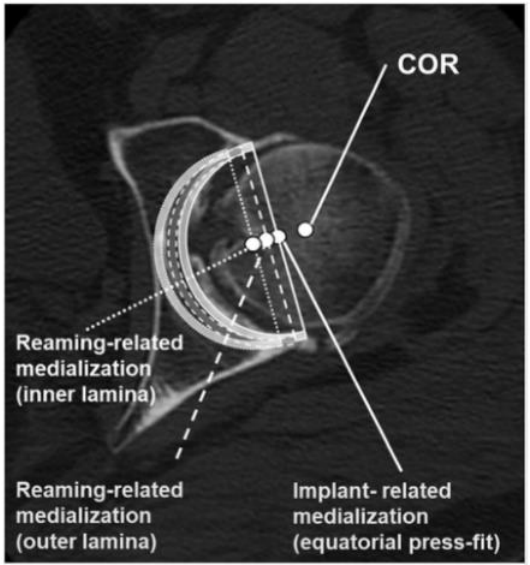
journal homepage: www.arthroplastyjournal.org

Basic Science

High Variability of Acetabular Offset in Primary Hip Osteoarthritis Influences Acetabular Reaming—A Computed Tomography–Based Anatomic Study

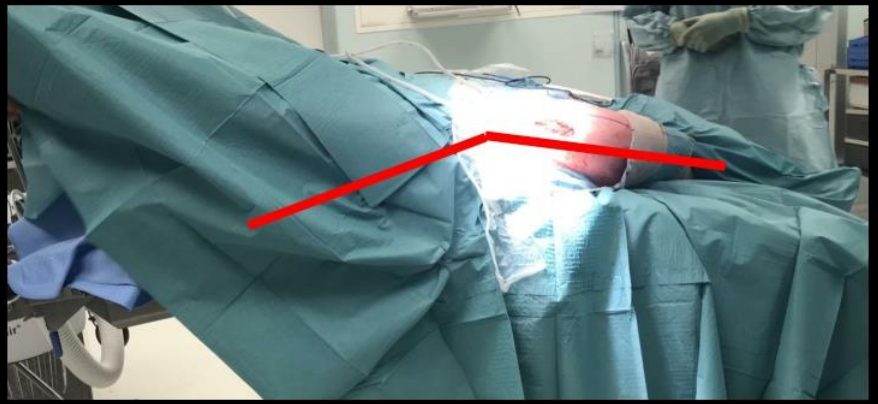
Christian Merle, MD, MSc [a,*], Moritz M. Innmann, MD [a], Wenzel Waldstein, MD [b],

Depending on the preferred reaming technique a substantial number of patients appear at RISK FOR EXCESSIVE CUP MEDIALIZATION!



Esposizione femore prossimale: risparmio trocanterico e abduttori, accesso e preparazione del canale midollare

Esposizione femore prossimale: risparmio trocanterico e abduttori, accesso e preparazione del canale midollare



Arto iperesteso

Esposizione femore prossimale: risparmio trocanterico e abduttori, accesso e preparazione del canale midollare

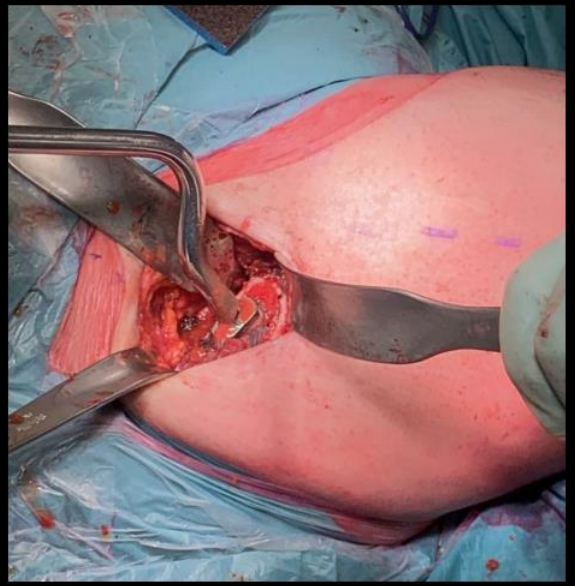
PEARLS AND PITFALLS

Liberazione dalla capsula laterale per esporre al meglio il canale, senza arrecare danno al trocantere ed ai tessuti molli

Esposizione femore prossimale: risparmio trocanterico e abduttori, accesso e preparazione del canale midollare

Box Osteotome/iniziatore:

Coda di topo

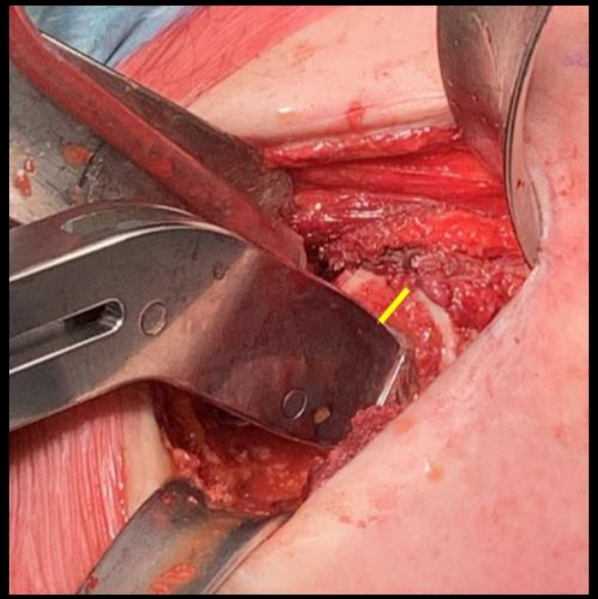


Raspe iniziale

Esposizione femore prossimale: risparmio trocanterico e abduttori, accesso e preparazione del canale midollare

PEARLS AND PITFALLS

Evitare contatto diretto anteriore della broccia per decidere giusta taglia ed evitare fratture



Esposizione femore prossimale: risparmio trocanterico e abduttori, accesso e preparazione del canale midollare

Clin Orthop Relat Res. 2005 Dec;441:115-24.

Single-incision anterior approach for total hip arthroplasty on an orthopaedic table.

Matta JM[1], Shahrdar C, Ferguson T.

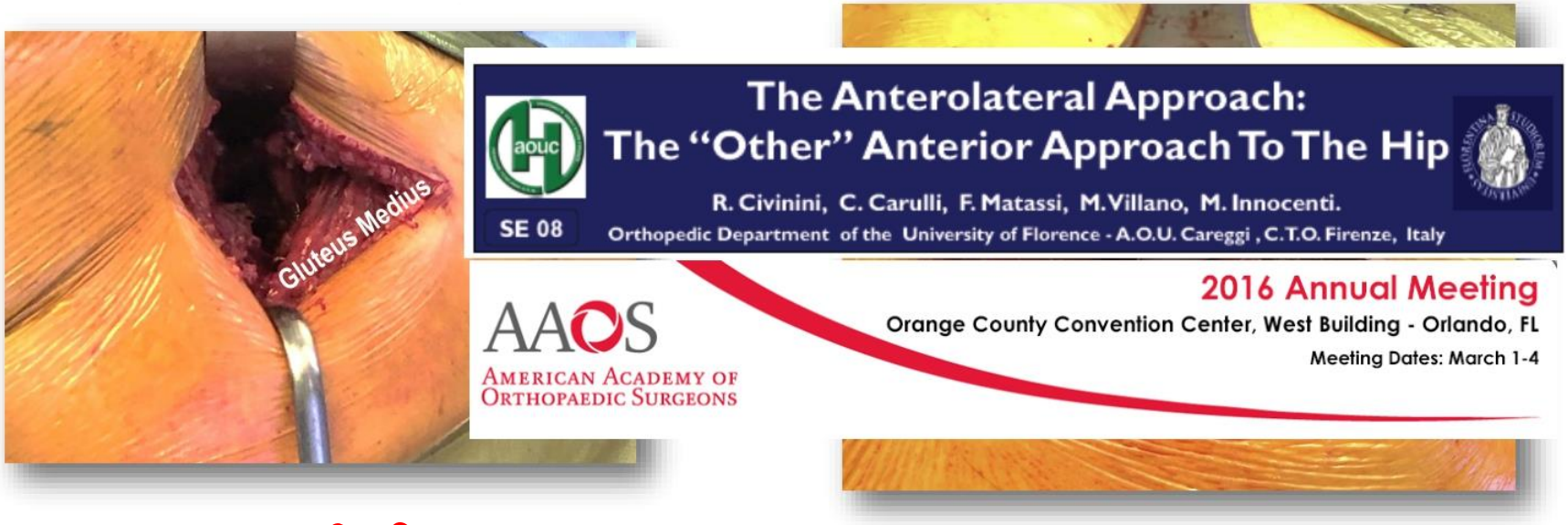
Author information

1 Department of Orthopaedic Surgery, Good Samaritan Hospital, University of Southern California, Los Angeles, CA 90017, USA. info@hipandpelvis.com

as factors influencing total hip arthroplasty stability. We describe a total hip arthroplasty technique done through a single, tissue sparing anterior approach that allows implantation of the femoral and acetabular components without detaching or sectioning any of the muscles and tendons around the hip joint. A series of 437 consecutive, unselected patients who had 494 primary total hip arthroplasty surgeries done

Via Antero-laterale:

Esposizione del femore

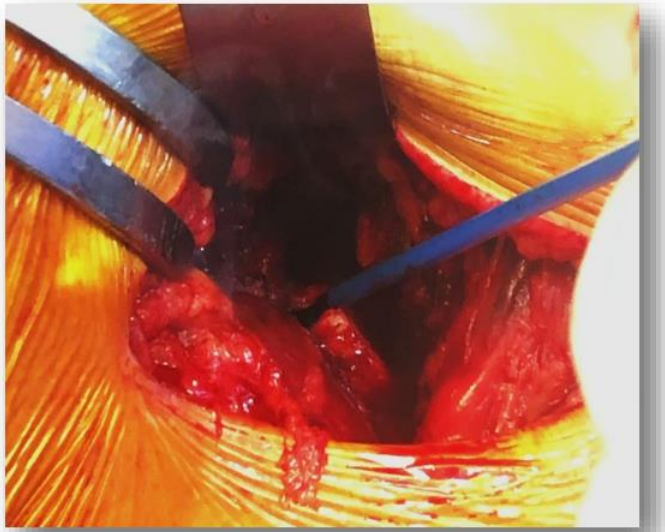


La via antero-laterale prevede il completo risparmio del medio gluteo

Via Antero-laterale:

Esposizione del femore

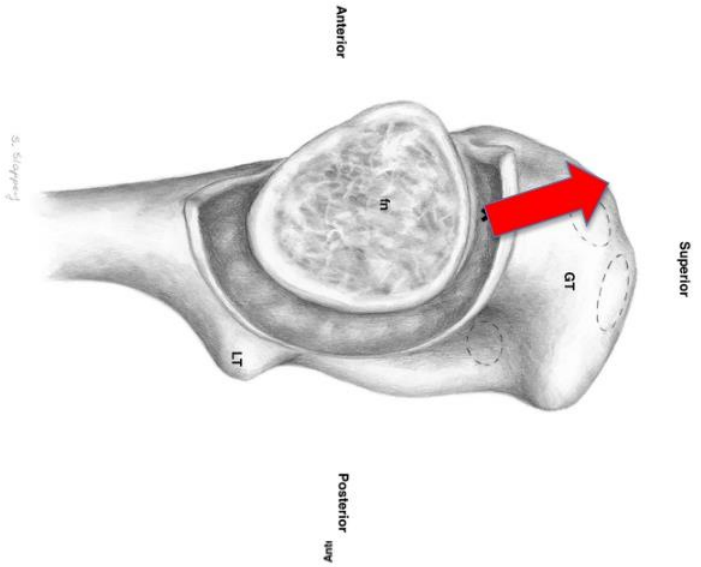
L'arto viene posizionato in
40° adduzione e 90° extrarotazione
(no iperestensione)

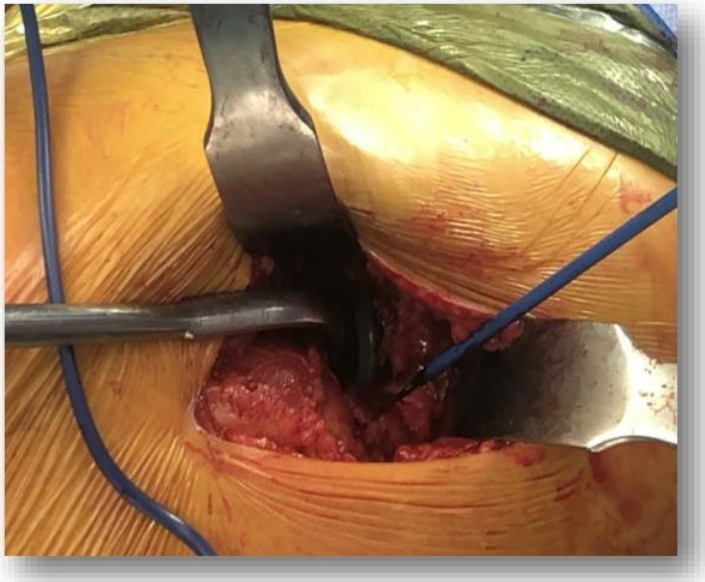


Eseguiamo per primo il release
della capsula inferiore
(Ligamento pubo-femorale)

Via Antero-laterale:

Esposizione del femore

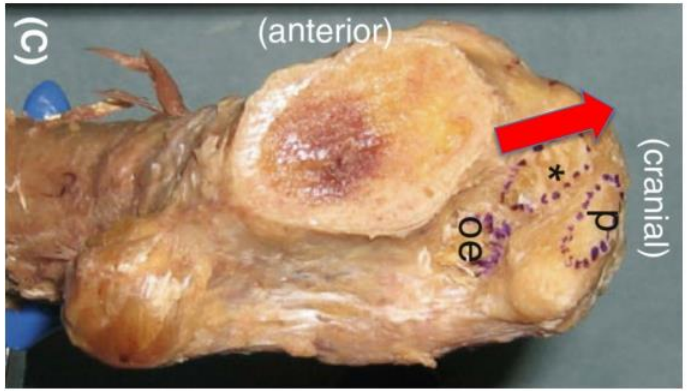


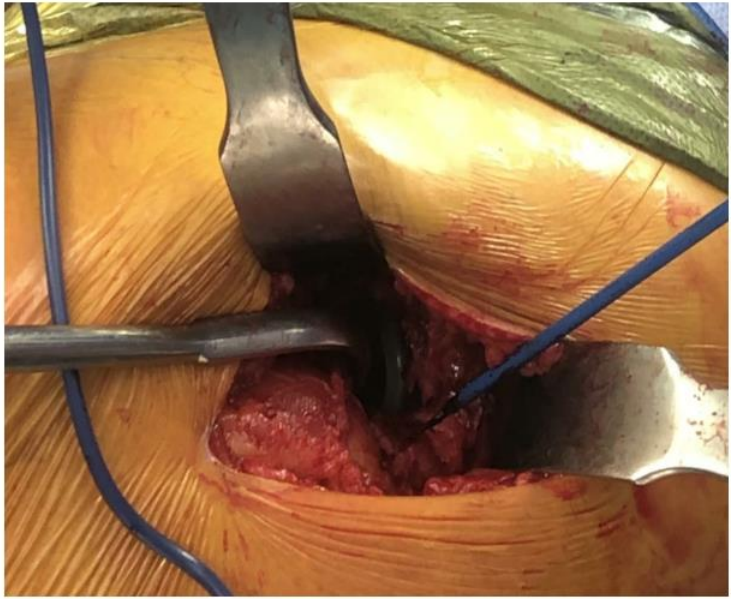


Realease della capsula superiore
fino alla corticale posteriore

Via Antero-laterale:

Esposizione del femore

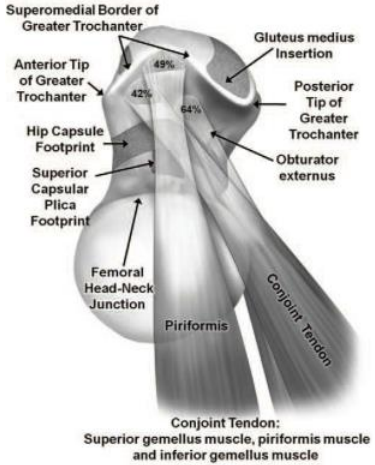


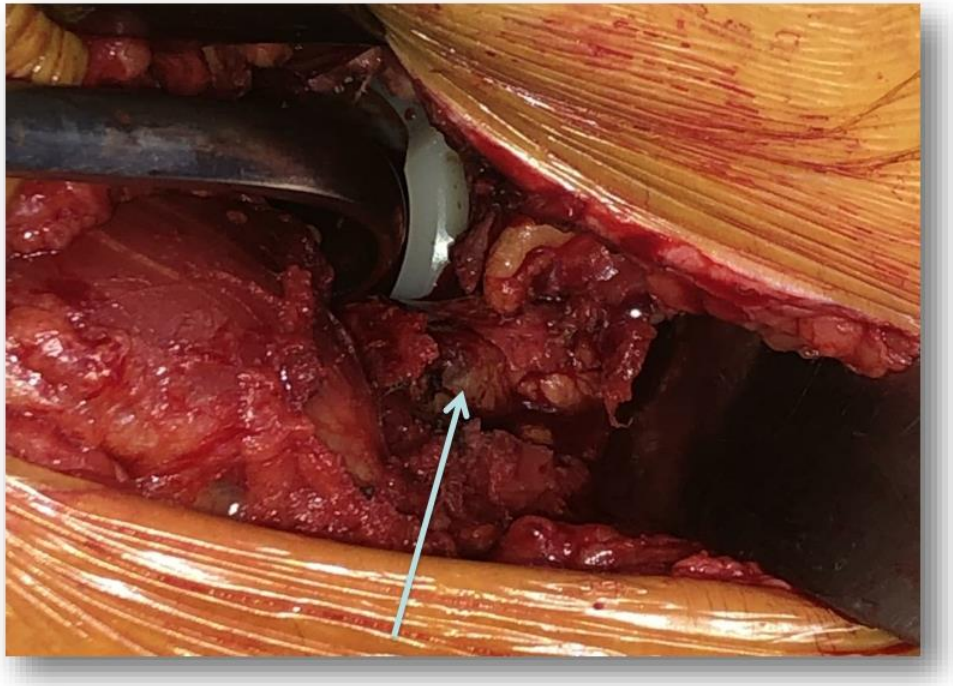


Si tratta della zona di inserzione del tendine congiunto (*) e del piriforme

Via Antero-laterale:

Esposizione del femore

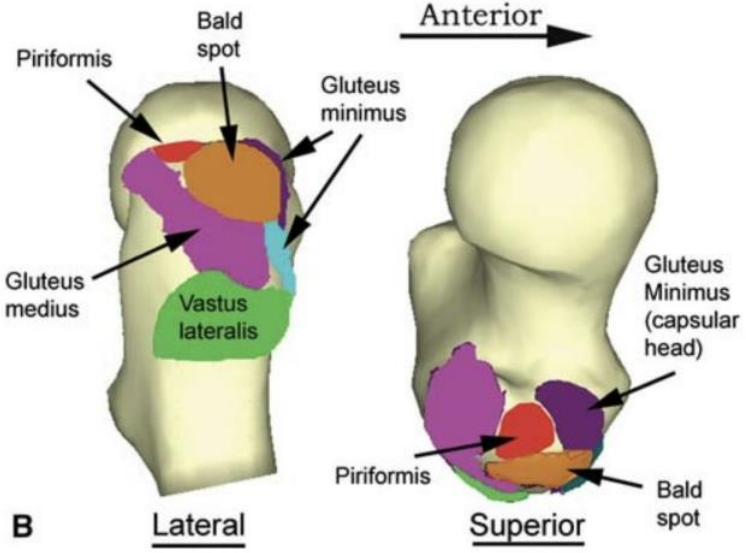


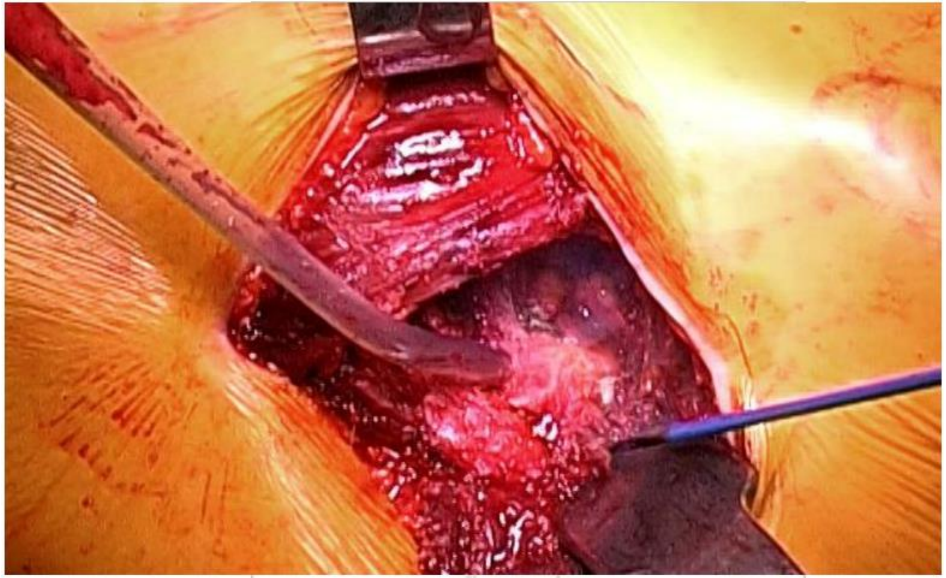


Si scopre il fat pad

Via Antero-laterale:

Esposizione del femore





Al di sotto del grasso si trova il «Bald Spot» quella zona di trocantere fra medio e piccolo gluteo dove non vi sono inserzioni muscolari

Via Antero-laterale:

Esposizione del femore

Utilizziamo steli a risparmio osseo trocanterico

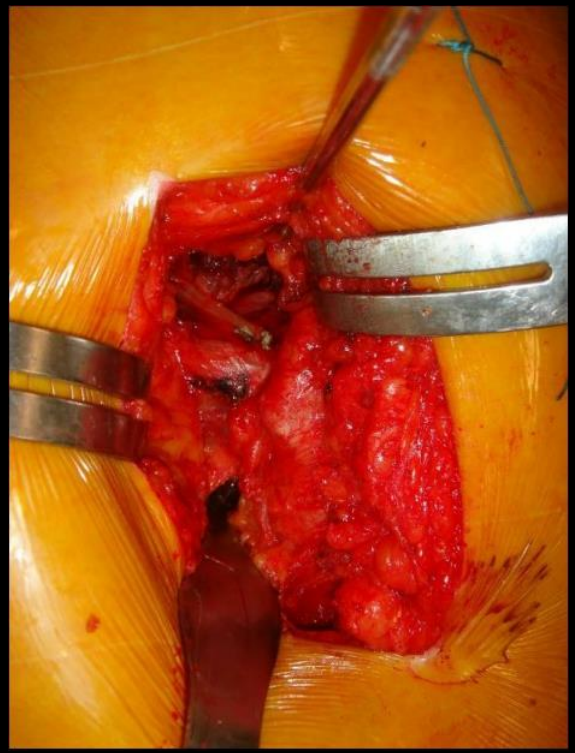
LA VIA POSTERO LATERALE

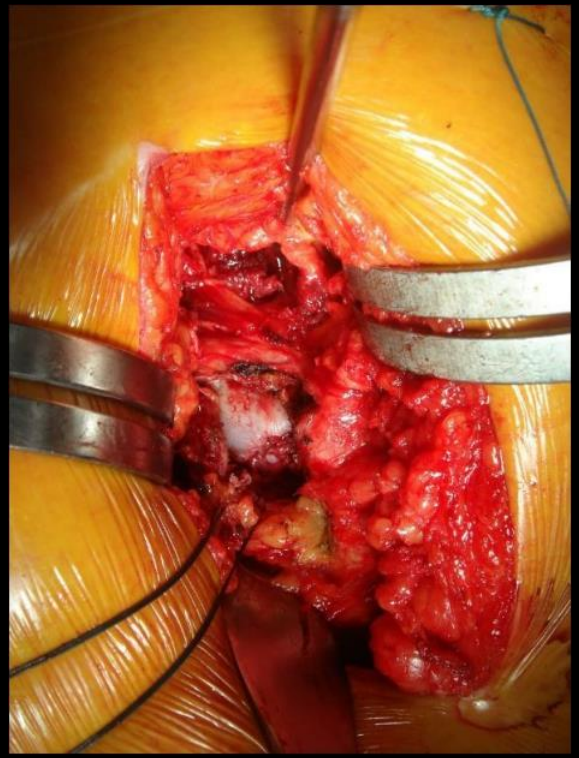
ESPOSIZIONE FEMORE PROSSIMALE:

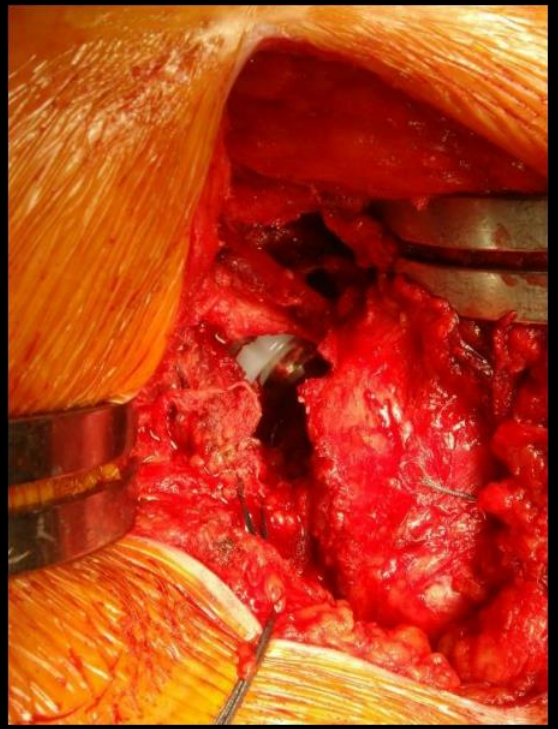
Risparmio trocanterico e Abduttori,

Accesso e preparazione canale midollare

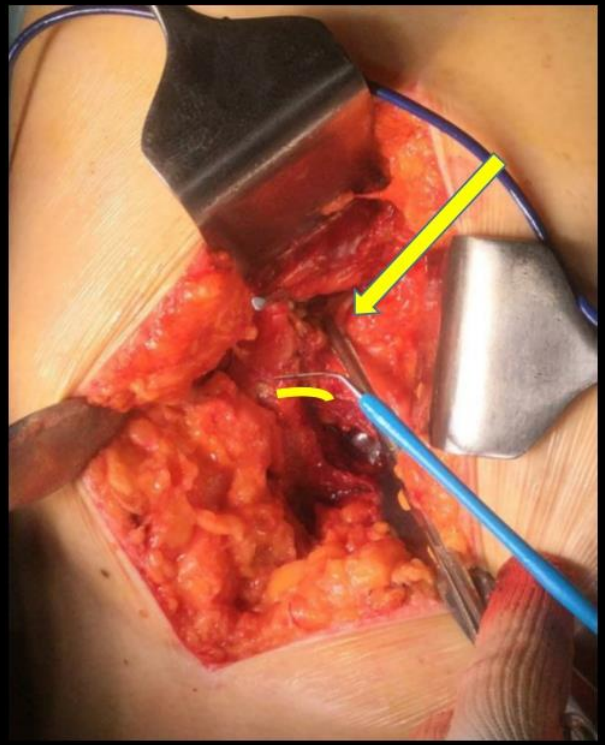
ABDUTTORI:
Conservazione del Piriforme



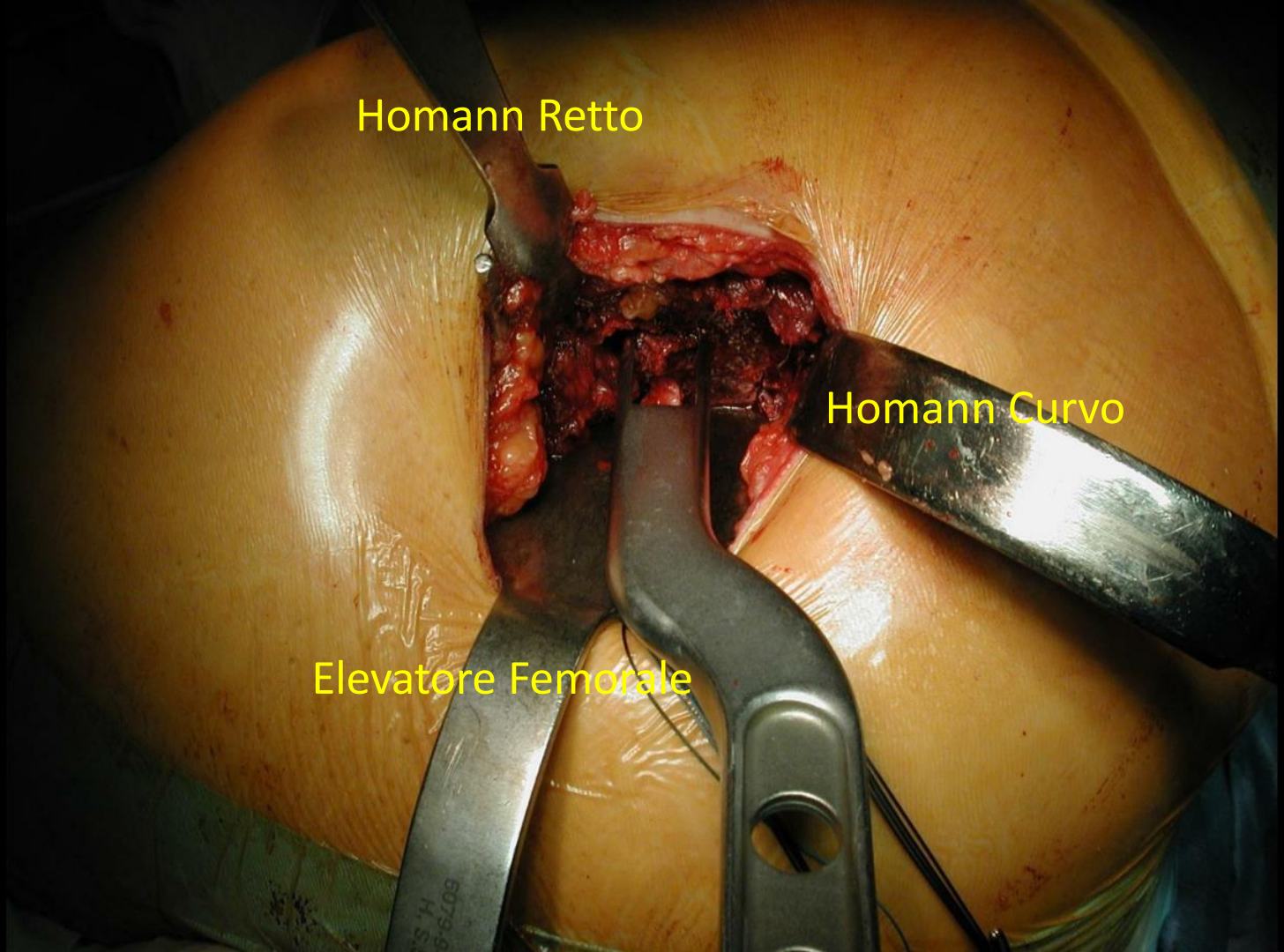




ABDUTTORI:
Resezione e isolamento

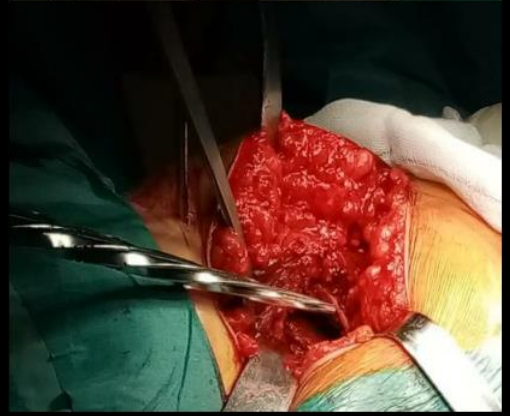


ESPOSIZIONE DEL FEMORE

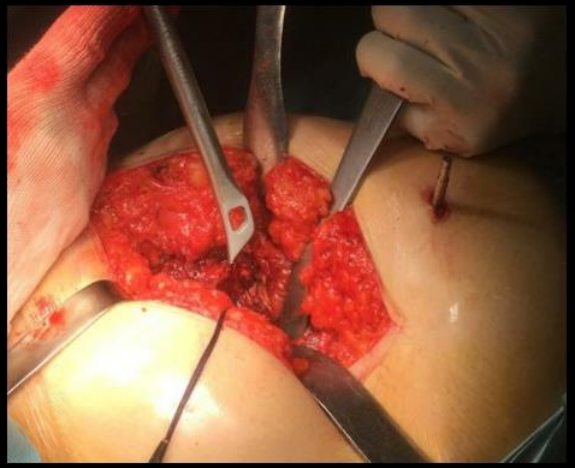

Homann Retto
Homann Curvo
Elevatore Femorale

RISPARMIO DEL GRAN TROCANTERE E PREPARAZIONE DEL CANALE:

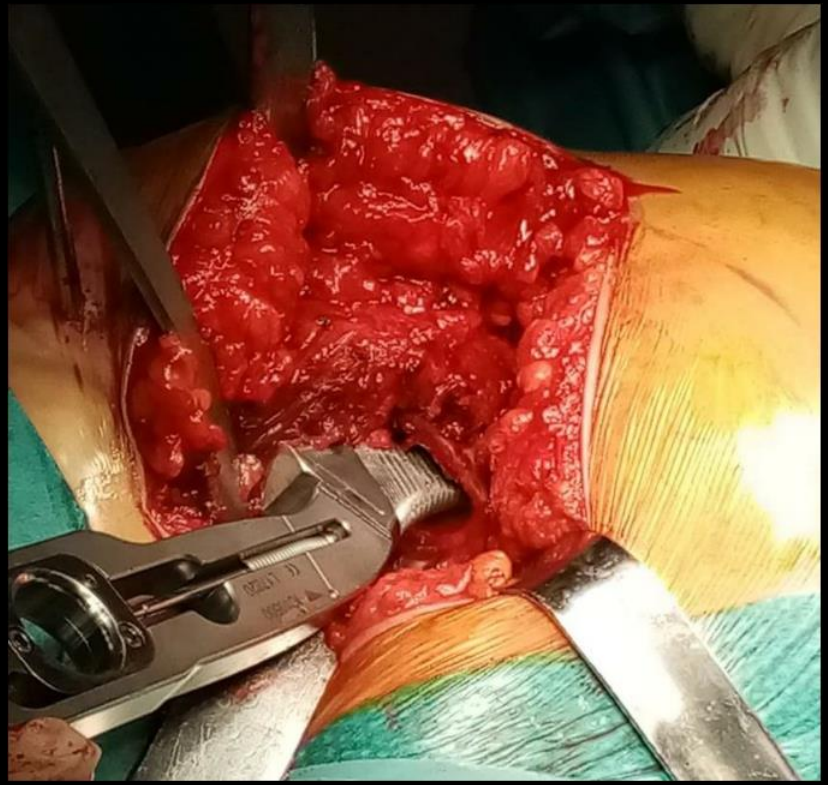
STELO STANDARD



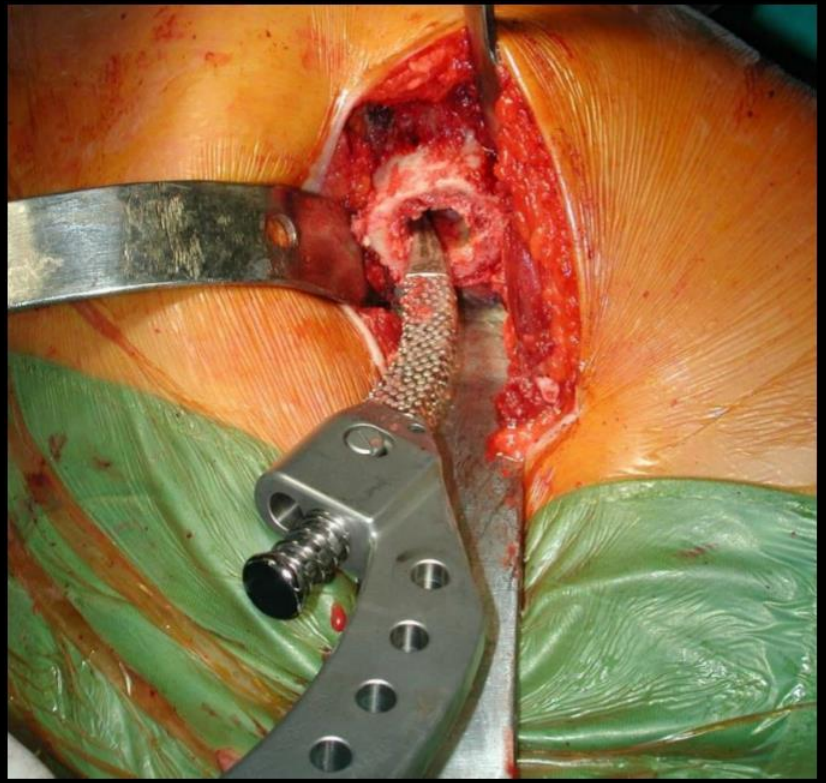
CONSERVAZIONE DI COLLO



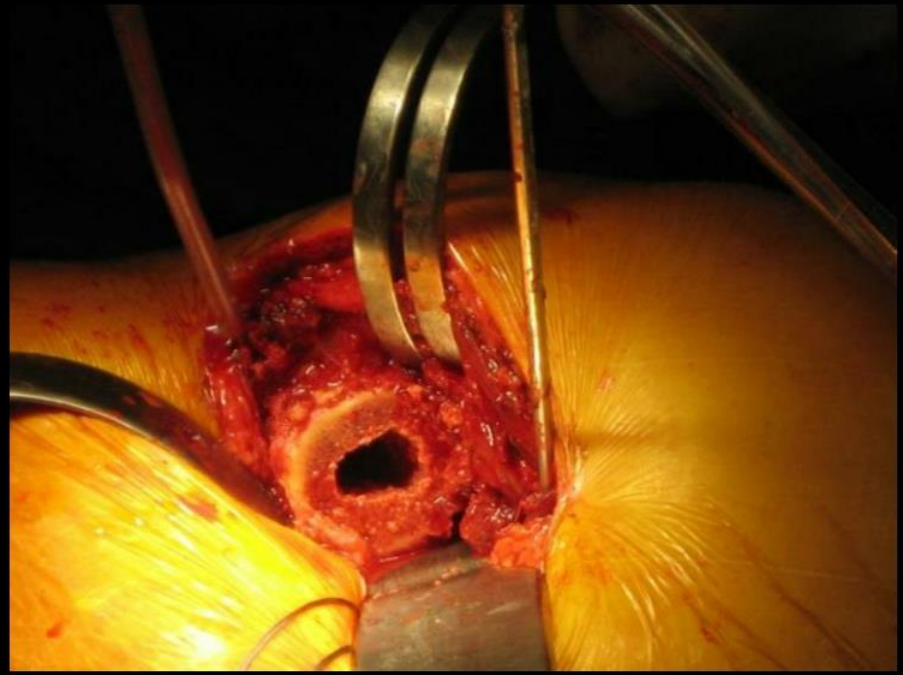
STELO STANDARD



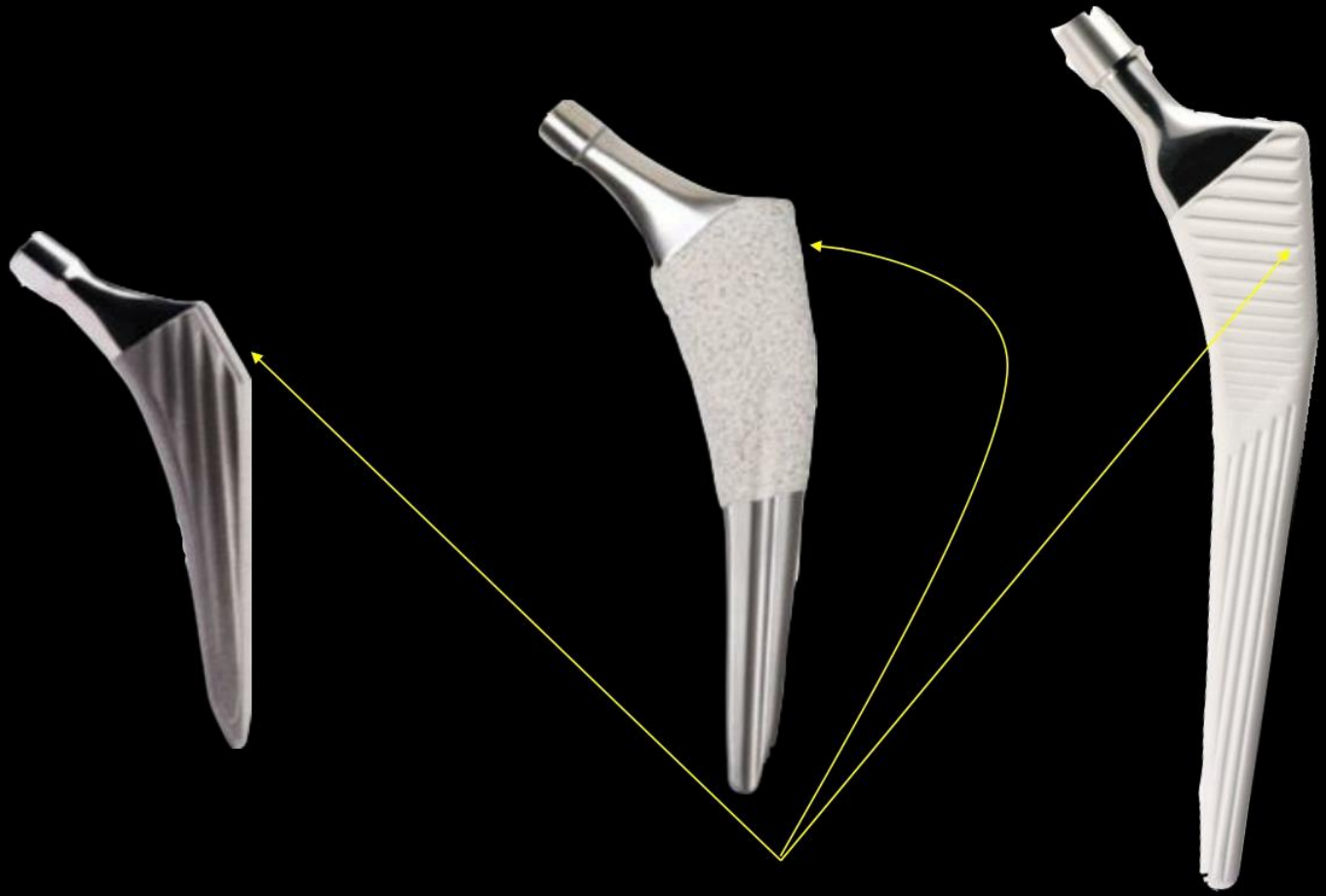
CONSERVAZIONE DI COLLO



STELO STANDARD	CONSERVAZIONE DI COLLO



STELI TRADIZIONALI A RISPARMIO DEL TROCANTERE E DEL CANALE



Verifica intraoperatoria di offset e dismetria

Verifica intraoperatoria di offset e dismetria

Verifica intraoperatoria di offset e dismetria

Orthop Traumatol Surg Res. 2018 Dec;104(8):1143-1148. doi: 10.1016/j.otsr.2018.06.020. Epub 2018 Oct 10.

Leg length discrepancy after total hip arthroplasty: Can leg length be satisfactorily controlled via anterior approach without a traction table? Evaluation in 56 patients with EOS 3D.

Lecoanet P[1], Vargas M[2], Pallaro J[3], Thelen T[2], Ribes C[2], Fabre T[2].

Author information

1 Service de chirurgie orthopédique, CHU Bordeaux, place Amélie-Raba-Léon, 33000 Bordeaux, France. Electronic address: paul.lecoanet@chu-bordeaux.fr.

2 Service de chirurgie orthopédique, CHU Bordeaux, place Amélie-Raba-Léon, 33000 Bordeaux, France.

3 Service de chirurgie orthopédique, hôpital privé Saint-Martin, allée des Tulipes, 33600 Pessac, France.

DISCUSSION: Although the frequency of LLD after THA in our study was consistent with earlier reports, our results show that good limb length control can be obtained via the DAA with a standard operating table. Thus, 7 of the 11 patients with a shorter limb and 1 of 4 with a longer limb before THA had equal limb lengths after THA, and only 8.9% of patients experienced a detrimental increase in limb length after THA. The DAA without a traction table allows satisfactory intra-operative limb length control based on visualisation of anatomical landmarks (antero-superior iliac spines and medial malleoli). This technique is therefore valuable for limiting the risk of LLD. When combined with 3D EOS planning, it may increase the accuracy of limb length adjustment.

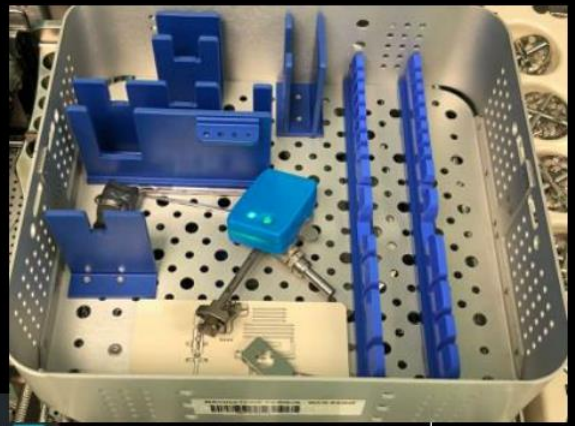
Verifica intraoperatoria di offset e dismetria

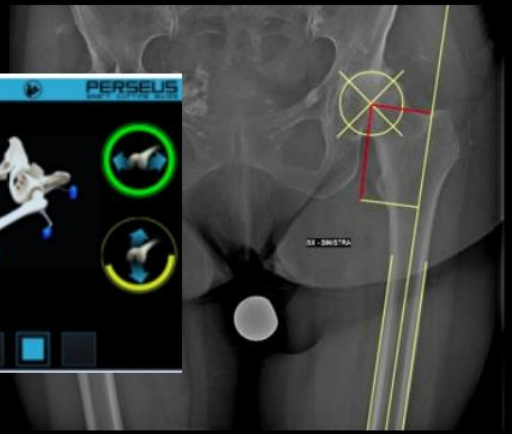
LA NOSTRA ESPERIENZA…

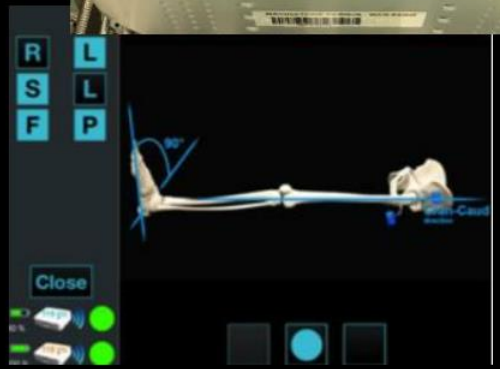
VALUTAZIONE PRELIMINARE DI TRIAL CLINICO RANDOMIZZATO SULL'UTILIZZO DI SENSORI INERZIALI IN ARTROPROTESI D'ANCA PER LA GESTIONE DELL'*OFF-SET* E DELLA DISMETRIA INTRAOPERATORIA

PERSEUS

Tesi di Laurea in Ortopedia e Traumatologia

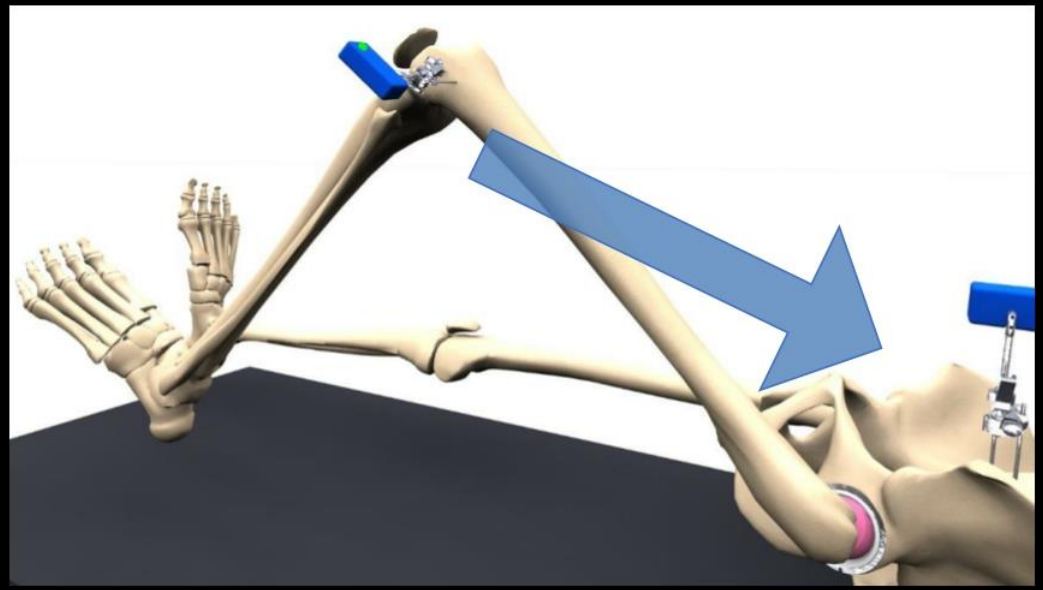






Verifica intraoperatoria di offset e dismetria

LA NOSTRA ESPERIENZA…



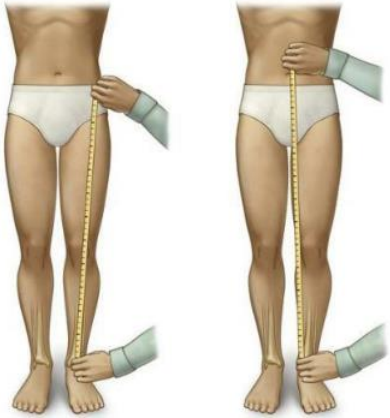
Via Antero-laterale:
Verifica intra-operatoria di lunghezza e offset

Con la componente di prova, si esegue la riduzione ed i test di stabilità, mobilità ed il controllo della lunghezza degli arti secondo planning preoperatorio

LA VIA POSTERO LATERALE

VERIFICA INTRAOPERATORIA:

Lunghezza e Offset



VERIFICA INTRAOPERATORIA:
Lunghezza e Offset

METODO STRUMENTALE	METODO EMPIRICO

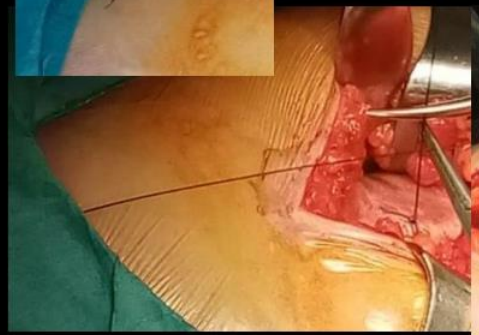
VERIFICA INTRAOPERATORIA:

Lunghezza e Offset

METODO STRUMENTALE METODO EMPIRICO

VERIFICA INTRAOPERATORIA:
Lunghezza e Offset

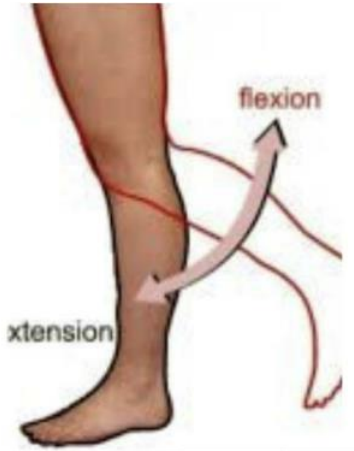
METODO STRUMENTALE	METODO EMPIRICO



COME VERIFICARE INTRAOPERATORIAMENTE L'ALLUNGAMENTO?

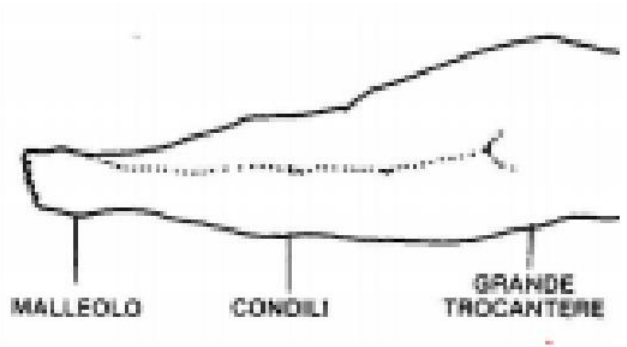
Kick Off test

If the leg is long…
the tibia will spontaneously kick forward on releasing the ankle



Misurazione Manuale

- Lunghezza alle ginocchia (rotula)
- Lunghezza ai malleoli



Cosa Dice La Letteratura…….

Original research article

HIP International

HIP International
2019, Vol. 29(1) 102–108

DOI: 10.1177/1120700018777858
journals.sagepub.com/home/hpi
SAGE

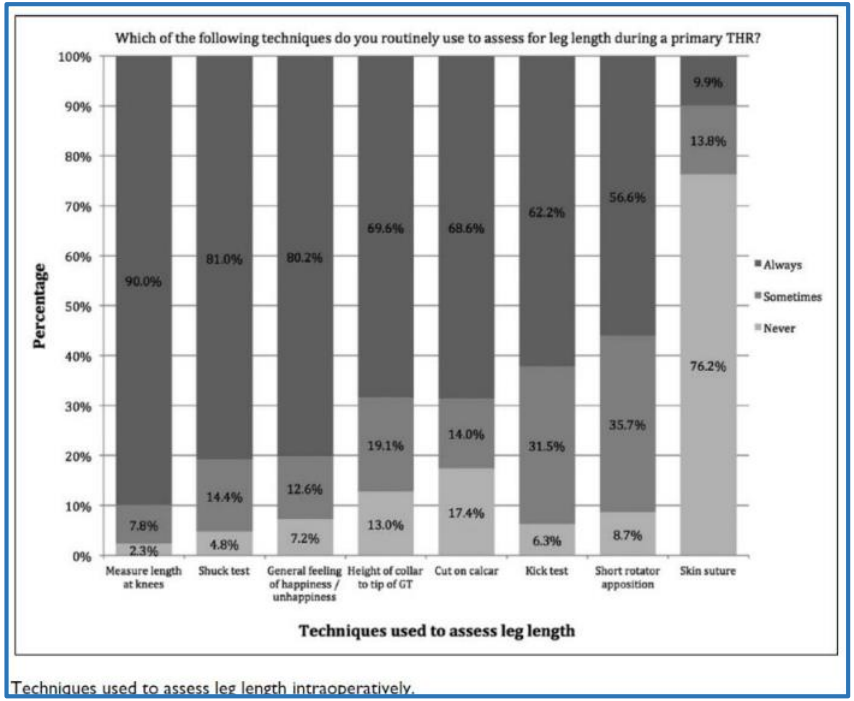
Hip surgeons and leg length inequality after primary hip replacement

Faye A Loughenbury[1], Anthony B McWilliams[1,2], Todd D Stewart[1,3], Anthony C Redmond[1,3] and Martin H Stone[1,3]

- All surgeons reported using at least 1 intraoperative technique for assessing leg length with a median of 5 techniques.

- ~~- Over 50% of surgeons use 2 or more tests~~

- The fact that more than 1 technique is used suggests that no single technique is completely accurate…..



Techniques used to assess leg length intraoperatively.

~~- Utilizzare più di 1 Tecnica consente maggiore precisione!~~

Amplificatore di brillanza

NO

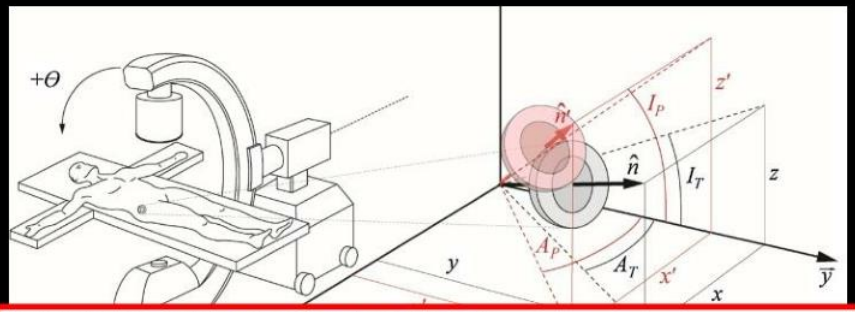
Clin Orthop Relat Res. 2014 Jun;472(6):1877-85. doi: 10.1007/s11999-014-3512-2. Epub 2014 Feb 19.

Does fluoroscopy with anterior hip arthroplasty decrease acetabular cup variability compared with a nonguided posterior approach?

Rathod PA[1], Bhalla S, Deshmukh AJ, Rodriguez JA.

CONCLUSIONS: Use of fluoroscopy with the patient in the supine position during direct anterior THA enables intraoperative assessment of cup orientation resulting in decreased variability of acetabular cup anteversion. However, there is a learning curve associated with achieving this accuracy. We could not discern whether this difference was the result of the approach or the use of fluoroscopy in the direct anterior group.

LEVEL OF EVIDENCE: Level III, therapeutic study. See the Instructions for Authors for a complete description of levels of evidence.



J Orthop. 2018 Mar 27;15(2):447-449. doi: 10.1016/j.jor.2018.03.036. eCollection 2018 Jun.

The effect of c-arm tilt on accuracy of intraoperative fluoroscopy in assessing acetabular component position during direct anterior approach for hip arthroplasty.

Jang ES[1], Lin JD[1], Shah RP[1], Geller JA[1], Cooper HJ[1].

La posizione del C-arm può influenzare negativamente

Amplificatore di brillanza

NO

Revie
w

J Bone Joint Surg Am. 2016 Sep 7;98(17):e72. doi: 10.2106/JBJS.15.01080.

Surgeons' Accuracy in Achieving Their Desired Acetabular Component Orientation.

Grammatopoulos G[1], Alvand A[2], Monk AP[2], Mellon S[3], Pandit H[2], Rees J[2], Gill HS[4], Murray DW[2].

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2 Nuffield Orthopaedic Centre, Oxford, United Kingdom Nuffield Department of Orthopaedics, Rheumatology & Musculoskeletal Sciences, Headington, Oxford, United Kingdom.

3 Nuffield Department of Orthopaedics, Rheumatology & Musculoskeletal Sciences, Headington, Oxford, United Kingdom.

4 Department of Mechanical Engineering, University of Bath, Bath, United Kingdom.

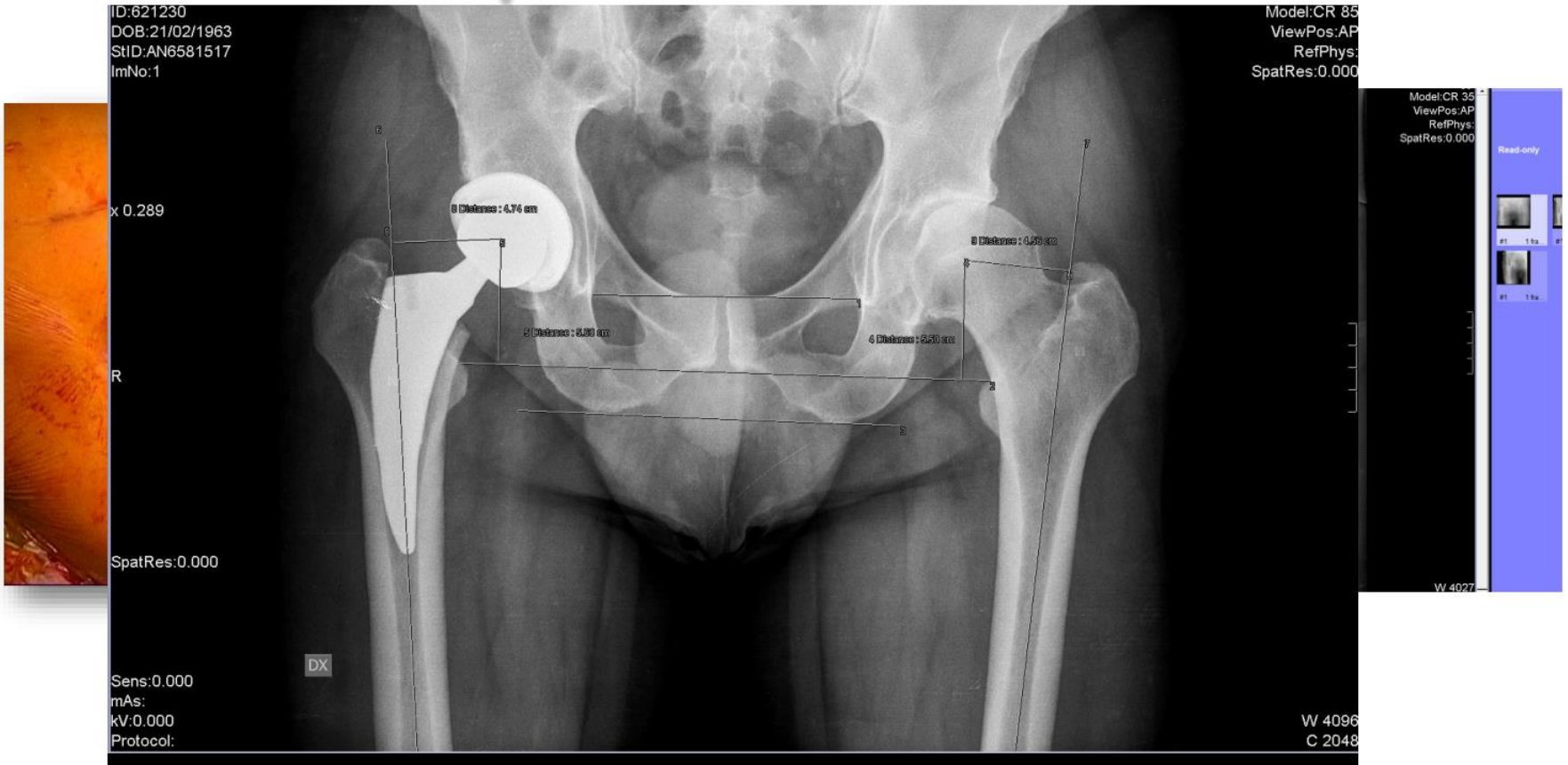
L'esperienza del chirurgo è il principale fattore di influenza

CONCLUSIONS: Surgeons overestimate their achieved cup orientation. Although the use of visual cues helps to achieve the desired radiographic cup orientation, conventional techniques result in a large variability in acetabular component orientation. New and better guides and methods for training need to be developed.

del posizionamento della coppa acetabolare in ogni approccio e setting utilizzato

Via Antero-laterale:

Amplificatore di brillanza



CONGRESSO NAZIONALE DELLA
SOCIETÀ ITALIANA DELL'ANCA

19-20 settembre 2019
BERGAMO

LA VIA POSTERO LATERALE

Amplificatore di brillanza:
no, sì e come

…..Steli corti….Sempre!

Steli normali….raramente!

Cosa Dice La Letteratura……Amplificatore di brillanza?

THE BONE & JOINT JOURNAL EST. 1948

■ HIP ARTHROPLASTY: MANAGEMENT FACTORIALS

Intra-operative digital imaging

ASSURING THE ALIGNMENT OF COMPONENTS WHEN UNDERTAKING TOTAL HIP ARTHROPLASTY

D. Hambright,
M. Hellman,
R. Barrack

From Washington University School of Medicine, Barnes-Jewish Hospital, Missouri, United States

Aims

The aims of this study were to examine the rate at which the positioning of the acetabular component, leg length discrepancy and femoral offset are outside an acceptable range in total hip arthroplasties (THAs) which either do or do not involve the use of intra-operative digital imaging.

- Intraoperative imaging requires additional resources and can increase operating time.

for surgery. The digital imaging group had more men than the group without. Surgical data

- The mean duration of intraoperative imaging has been reported to be..

…5 minutes….

Digital imaging took a mean of five minutes (2.3 to 14.6) to perform. Intra-operative changes with the use of digital imaging were made for 43 patients (86%), most commonly to adjust leg length and femoral offset. There was a decrease in the incidence of outliers when using intra-operative imaging compared with not using it in regard to leg length discrepancy (20% *versus* 52%, p = 0.001) and femoral offset inequality (18% *versus* 44%, p = 0.004). There was also a difference in the incidence of outliers in acetabular inclination (0% *versus* 7%, p = 0.023) and version (0% *versus* 4%, p = 0.114) compared with historical results of a high-volume surgeon at the same centre.

Conclusion

The use of intra-operative digital imaging in THA improves the accuracy of the positioning of the components at THA without adding a substantial amount of time to the operation.

Cite this article: *Bone Joint J* 2018;100B(1 Supple A):36–43.

■ D. Hambright, MD, Orthopaedic Surgery Fellow, Department of Orthopaedic Surgery, Washington University School of Medicine Barnes-Jewish Hospital , 660 South Euclid, Campus Box 8233, St. Louis, MO 63110, USA.

■ M. Hellman, MD,

Limb lenght= 20%vs 50%
Off set=%vs 44%

Inclination=0%vs 7%
Anteversion=0%vs 7%

Cosa Dice La Letteratura……Amplificatore di brillanza?

■ THE HIP SOCIETY

Changes in acetabular orientation during total hip arthroplasty

D. T. Schloemann,
A. I. Edelstein,
R. L. Barrack

From Washington University School of Medicine, St. Louis, Missouri, United States

- ~~intraoperative imaging~~ …~~allows identification of pelvic changes~~…..

- …and may dramatically decrease the incidence of malpositioning of ~~the component!~~

Beamer BS, Morgan JH, Barr C, Weaver MJ, Vrahas MS. Does fluoroscopy improve acetabular component placement in total hip arthroplasty? *Clin Orthop Relat Res* 2014;472:3953–3962.

Penenberg BL, Woehnl A. Intraoperative digital radiography: an opportunity to assure. *Seminars in Arthroplasty* 2014;25:130–134.

Penenberg BL, Samagh SP, Rajaee SS, Woehnl A, Brien WW. Digital radiography in total hip arthroplasty: technique and radiographic results. *J Bone Joint Surg [Am]* 2018;100-A:226–235.

NO

Clin Orthop Relat Res. 2015 Nov; 473(11): 3401–3408.
Published online 2015 Mar 12. doi: 10.1007/s11999-015-4230-0
PMCID: PMC4586236
PMID: 25762014

Anterior and Anterolateral Approaches for THA Are Associated With Lower Dislocation Risk Without Higher Revision Risk

Dhiren Sheth, MD, Guy Cafri, PhD, Maria C. S. Inacio, PhD, Elizabeth W. Paxton, MA, and Robert S. Namba, MD

Clin Orthop Relat Res. 2006 Jun;447:34-8.

Does surgical approach affect total hip arthroplasty dislocation rates?

Kwon MS[1], Kuskowski M, Mulhall KJ, Macaulay W, Brown TE, Saleh KJ.

Author information

1 Department of Orthopaedic Surgery, University of Virginia, Charlottesville, VA, USA.

J Arthroplasty. 2015 Mar;30(3):419-34. doi: 10.1016/j.arth.2014.10.020. Epub 2014 Oct 22.

Anterior vs. posterior approach for total hip arthroplasty, a systematic review and meta-analysis.

Higgins BT[1], Barlow DR[2], Heagerty NE[3], Lin TJ[1].

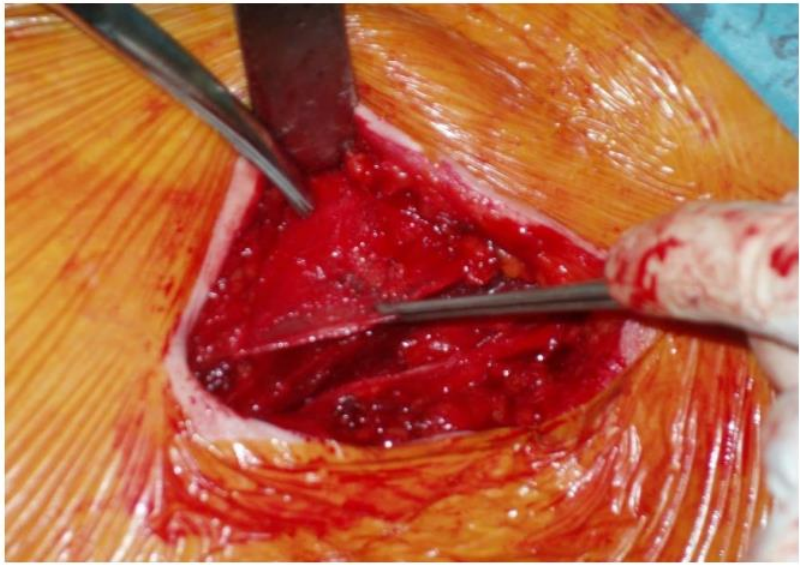
Author information

1 Department of Orthopaedic Surgery, Dartmouth Hitchcock Medical Center, Lebanon, New Hampshire; The Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, New Hampshire.
2 The Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, New Hampshire; Geisel School of Medicine at Dartmouth, Hanover, New Hampshire.
3 The Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, New Hampshire.

Il vantaggio della sutura capsulare è dimostrato essere un minor tasso di lussazione.

Via Antero-laterale:

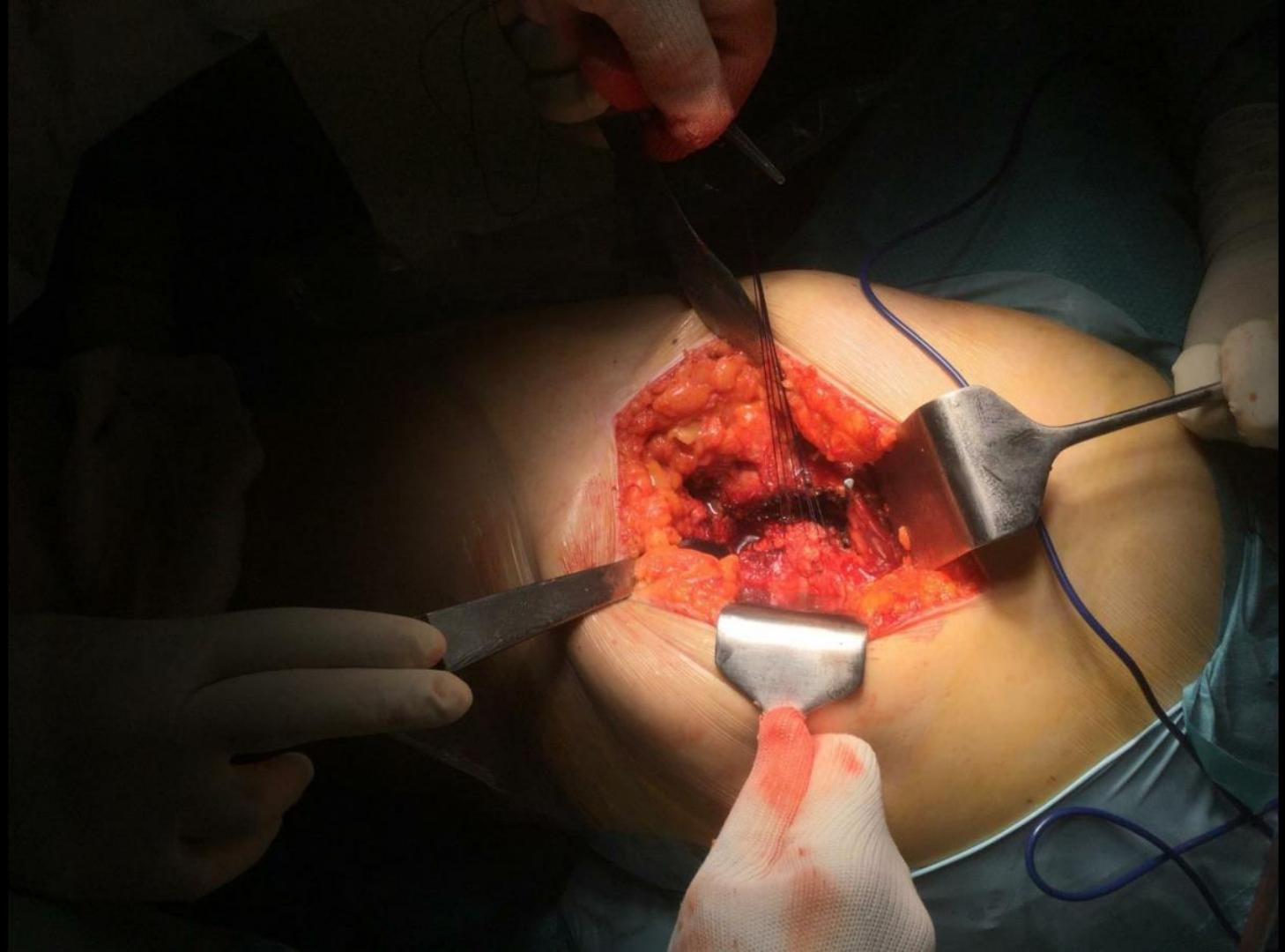
Sutura capsulare

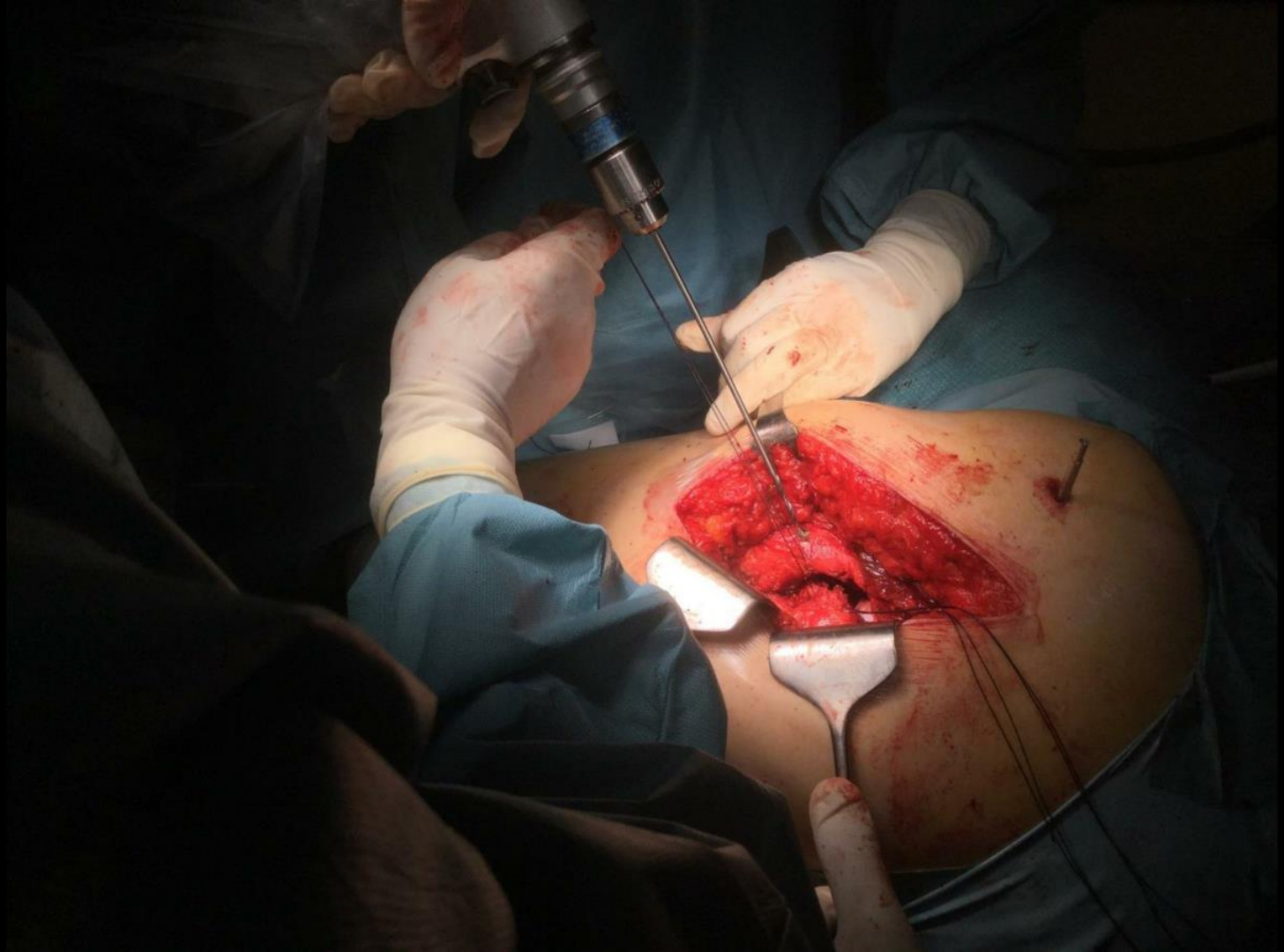


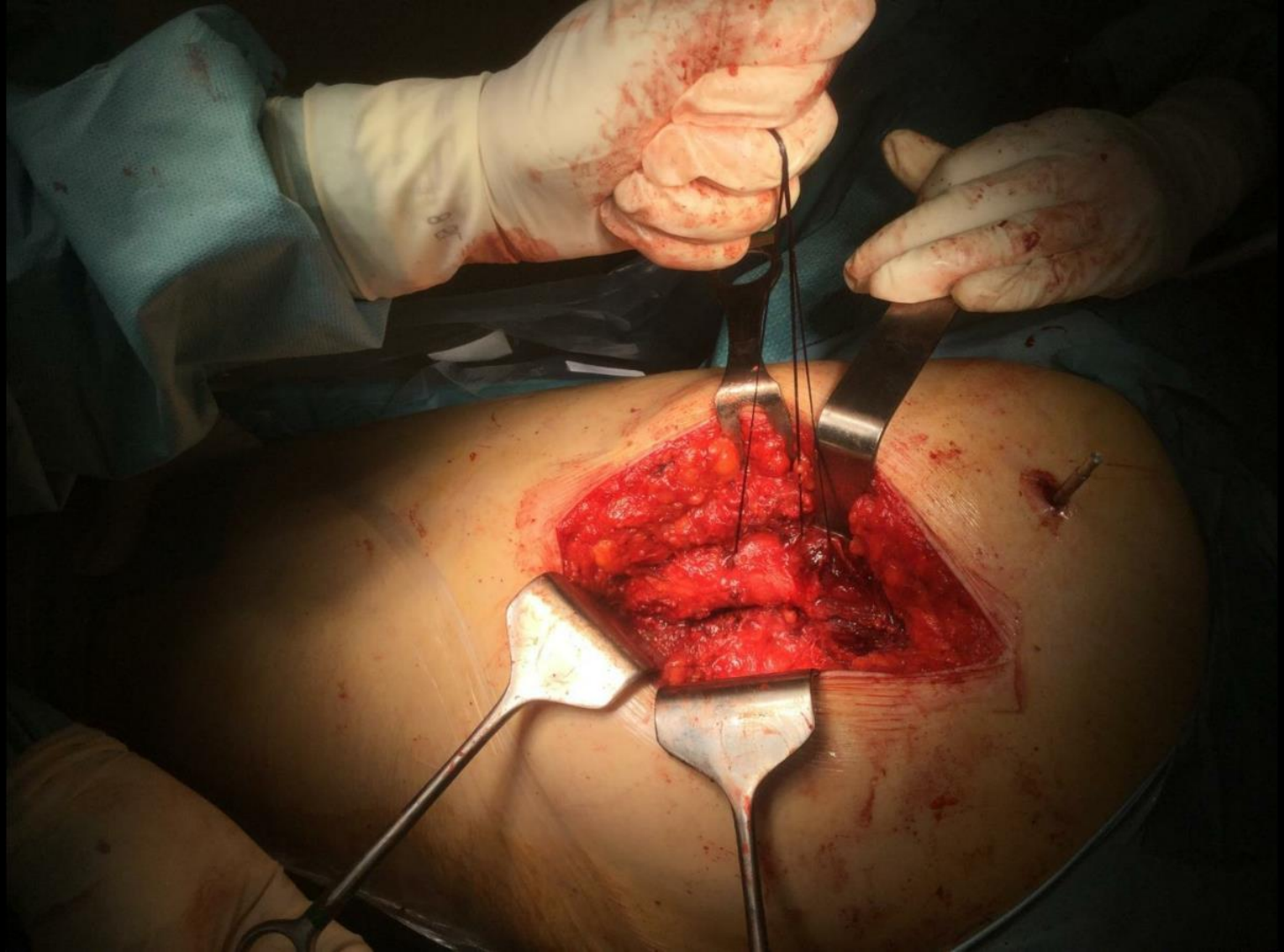
Non eseguiamo nessuna sutura capsulare (Rischio contrattura in flessione)

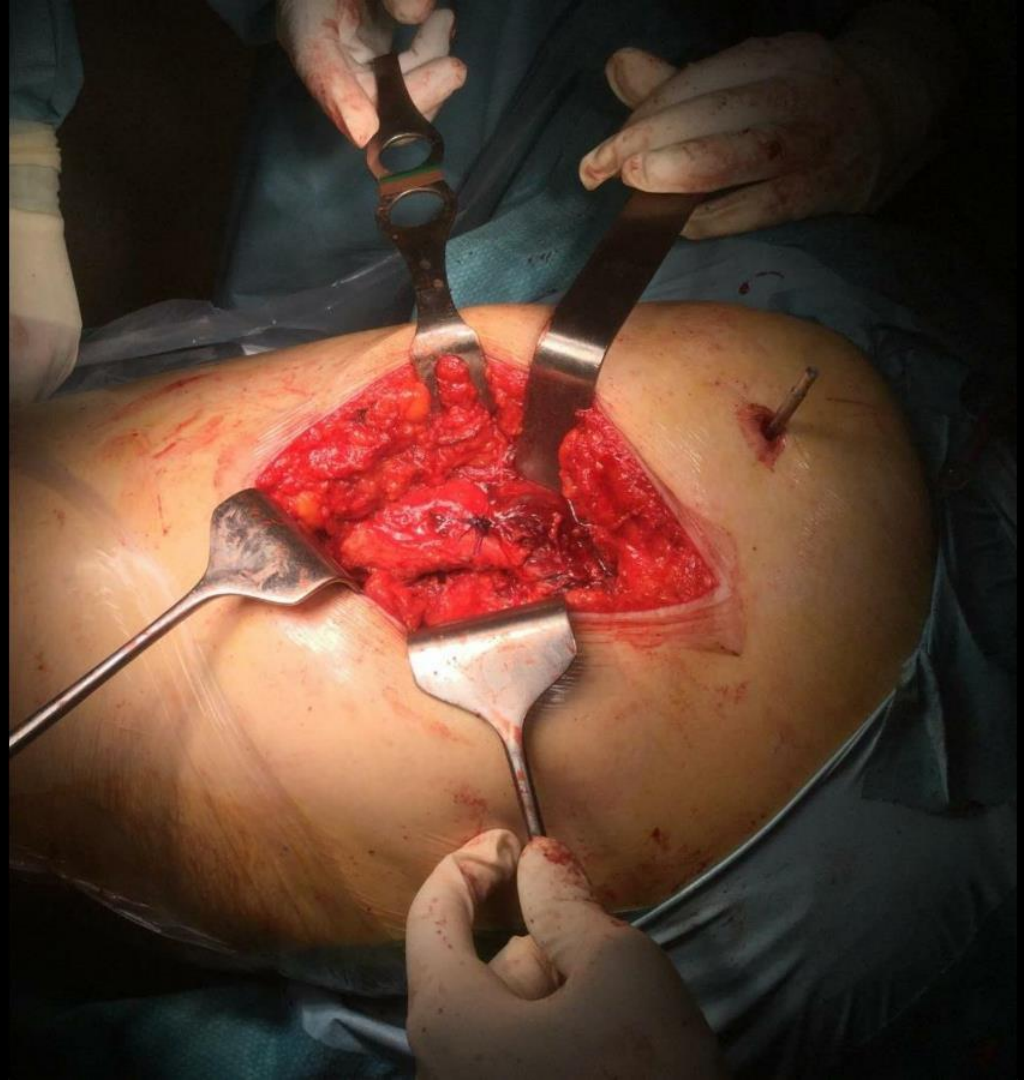
LA VIA POSTERO LATERALE

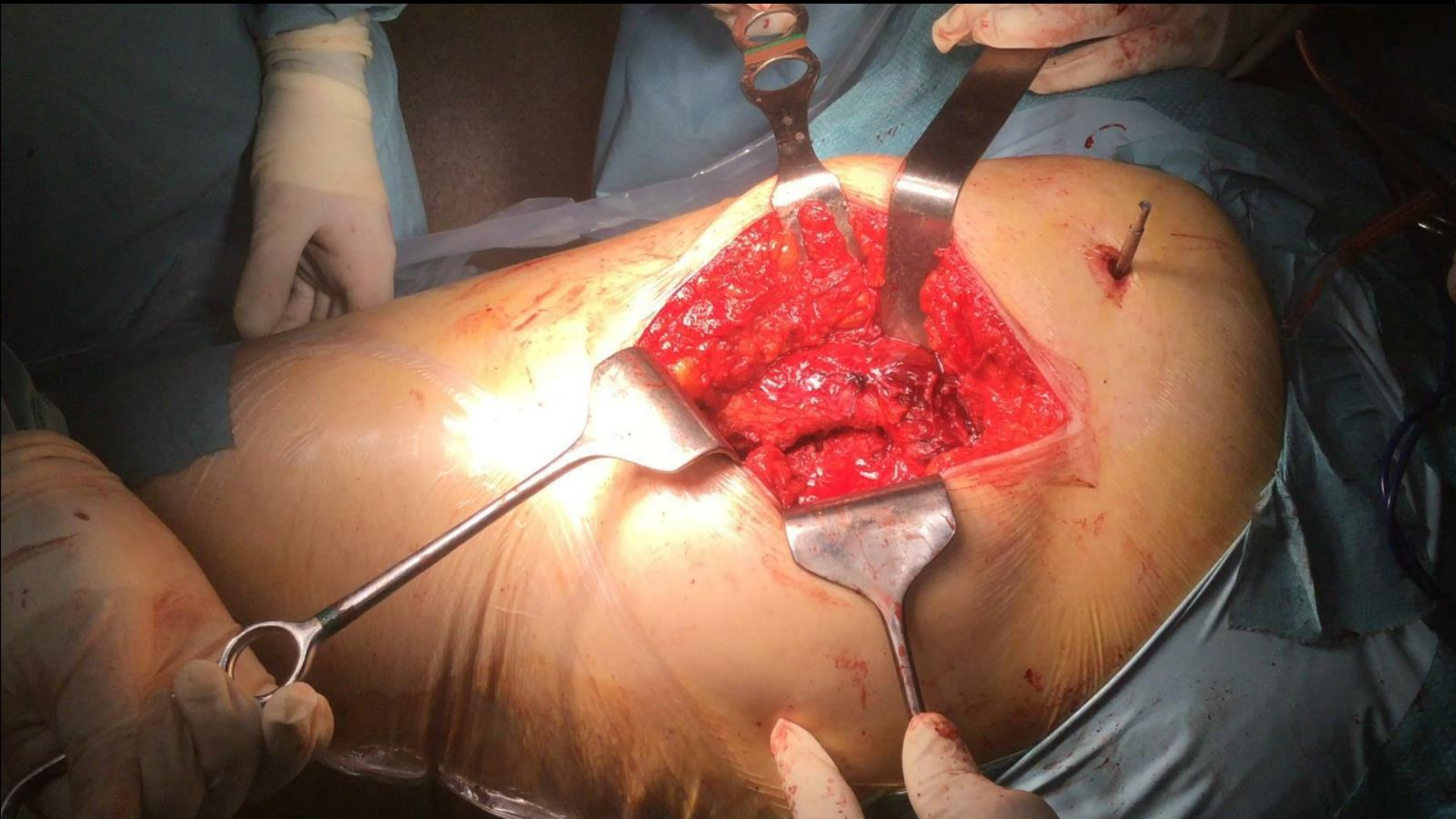
SUTURA CAPSULARE:
No, Sì e Come











Cosa Dice La Letteratura……

HSSJ (2006) 2: 7–11
DOI 10.1007/s11420-005-0134-y

REVIEW ARTICLE

Review: Posterior Soft Tissue Repair in Primary Total Hip Arthroplasty

F. Bottner, MD · P. M. Pellicci, MD

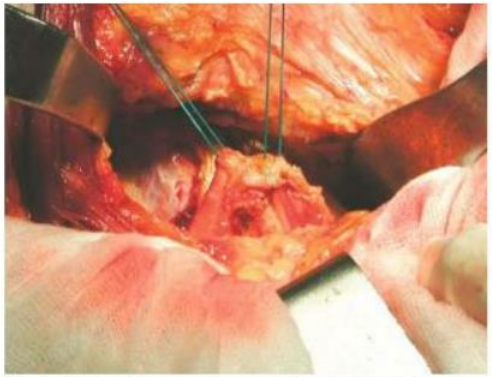


Fig. 2. Ethibond tagging sutures are placed in the short external rotators

Dislocation in Posterior approach

may be avoid

……using Enahanced Posterior Soft Tissue Repair

P.M. Pellicci et al., CORR,

Dislocation in Posterior approach

may be avoid

……using Enahanced Posterior Soft Tissue Repair

P.M. Pellicci et al., CORR,

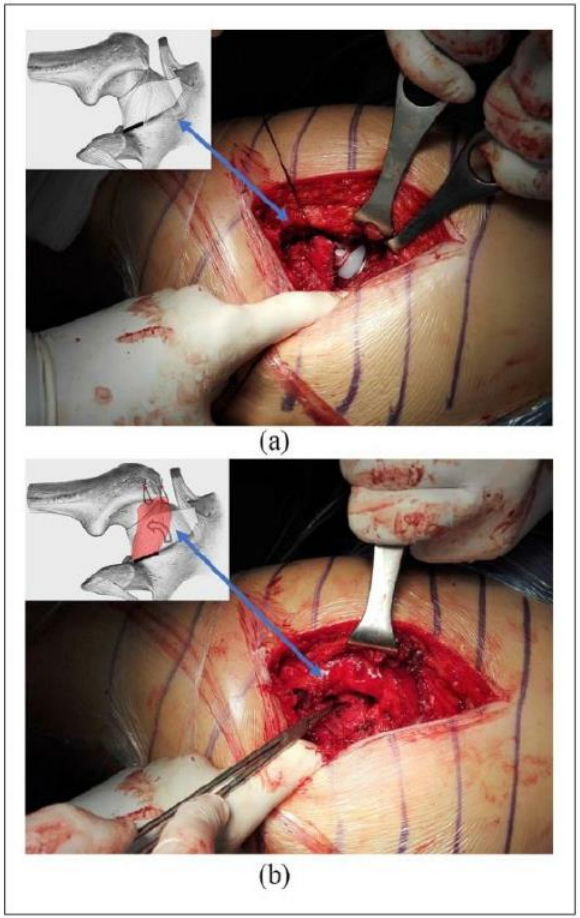


Figure 4. Distal based capsular shift technique. (a) a strip of retracted capsule is detached from the upper posterior acetabular margin (b) a 2nd stich is applied to capsular margin and the strip is rotated and inserted onto the greater trochanter.

Original research article

HIP International

HIP International
2018, Vol. 28(2S) 3–9

DOI: 10.1177/1120700018813217
journals.sagepub.com/home/hpi
SAGE

Tension-free closure with capsular lengthening in mini posterior total hip replacement

Nicola Santori

HIP International 2018, Vol. 28(2S) 3–9

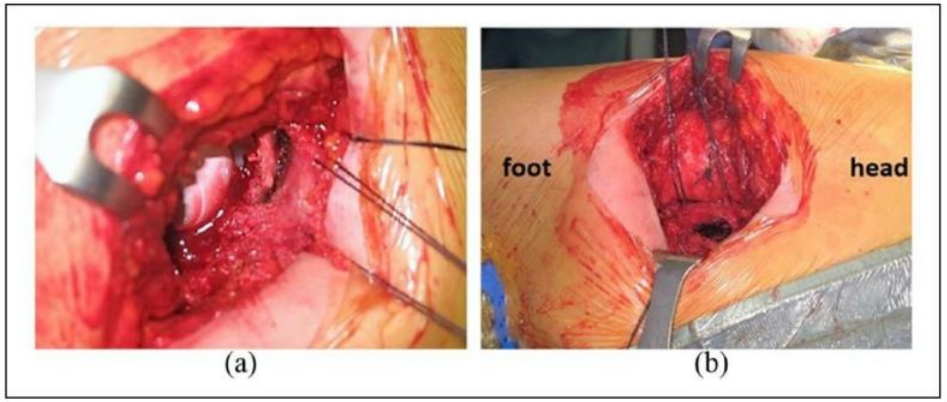


Figure 3. Inside-out bucket-handle capsular lengthening technique. (a) Partial inside-out capsulectomy preserving proximal and distal capsular insertions on the acetabulum. (b) Adequate approximation to the greater trochanter of the lengthened posterior envelope with 45° of hip flexion and 30° of internal rotation. The piriformis tendon is fixed on the gluteus medius close to the tip of the greater trochanter.

Regime e Restrizioni post-operatorie

VALUTAZIONE DELL'EFFICACIA DEL PROTOCOLLO FAST-TRACK NELL'ARTROPROTESI D'ANCA VS PROTOCOLLO "STANDARD CARE" NELLA RIDUZIONE DELLA DEGENZA OSPEDALIERA E NELLA RIPRESA DEL CARICO PRECOCE: STUDIO RANDOMIZZATO CONTROLLATO

CONGRESSO NAZIONALE DELLA
SOCIETÀ ITALIANA DELL'ANCA

19-20 settembre 2019
BERGAMO

SALA B

09.00
10.00 **COMUNICAZIONI ORALI 6** (cont.)

Studio randomizzato controllato sull'efficacia del protocollo fast track vs protocollo "standard care" nel recupero funzionale precoce in protesica d'anca
Martina Rocchi, Cesare Stagni, Alessandro Mazzotta, Giuseppe Di Sante, Dante Dallari (Bologna)

- Giorno 3
  - ✓ Autonomia BADL (Attività di Base della Vita Quotidiana)
  - ✓ Autonomia trasferimenti letto-poltrona
  - ✓ Autonomia spostamenti in bagno
  - ✓ Deambulazione *con carico*

A tolleranza

DIMISSIONE

Via Antero-laterale:
Regime e restrizioni post-operatorie immediate

Nessuna tutore o restrizione di posizione

Nessun presidio a domicilio

Via Antero-laterale:
Regime e restrizioni post-operatorie immediate

Limitare adduzione ed extrarotazione combinate

Carico post-operatorio completo, come tollerato, dal I° giorno post-op.

LA VIA POSTERO LATERALE

REGIME E RESTRIZIONI POST OPERATORIE IMMEDIATE:

No, Sì e Quali

Prime 3 settimane

Cuscino Divaricatore

(quando eravamo ricchi!)

Cuscino divaricatore di oggi

(Spending Review!)

Standard Protocol

Subito

•Contrazioni e movimento attivo (0-60°)

~~I giorno post-op~~

•Seduta (< 90°) e in statica eretta

Prime 3 settimane

Deambulazione

II giorno postop

- Deambulazione con carico graduale con Appoggi

Precauzioni

- Rialzo per il water
- Seduta elevata
  (Flessione > 90°)

Posizioni Sconsigliate

- Flessione > 90°
- Intrarotazione
- Adduzione

NON ACCAVALLARE LE GAMBE!

Collaborazione Medico di Base - Specialista

ATTENZIONE alle…. INFEZIONI

0.5 / 2 %

“Rischio di infezioni a seguito di manovre invasive …”

(A. D. Hanssen et al., JBJS, 1996)

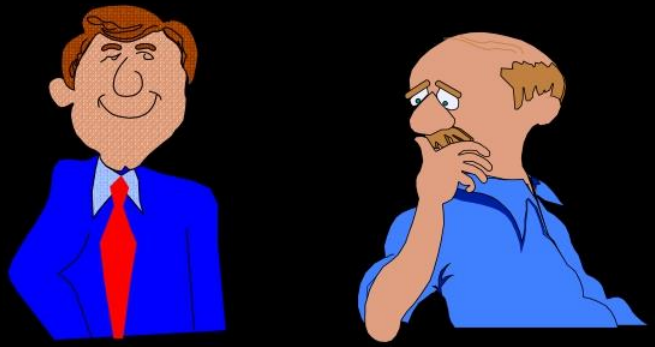
•*dentali , urologiche (endoscopia, cateterismo), cateterismo venoso*

Fare Profilassi antibiotica

Collaborazione Medico di Base - Specialista

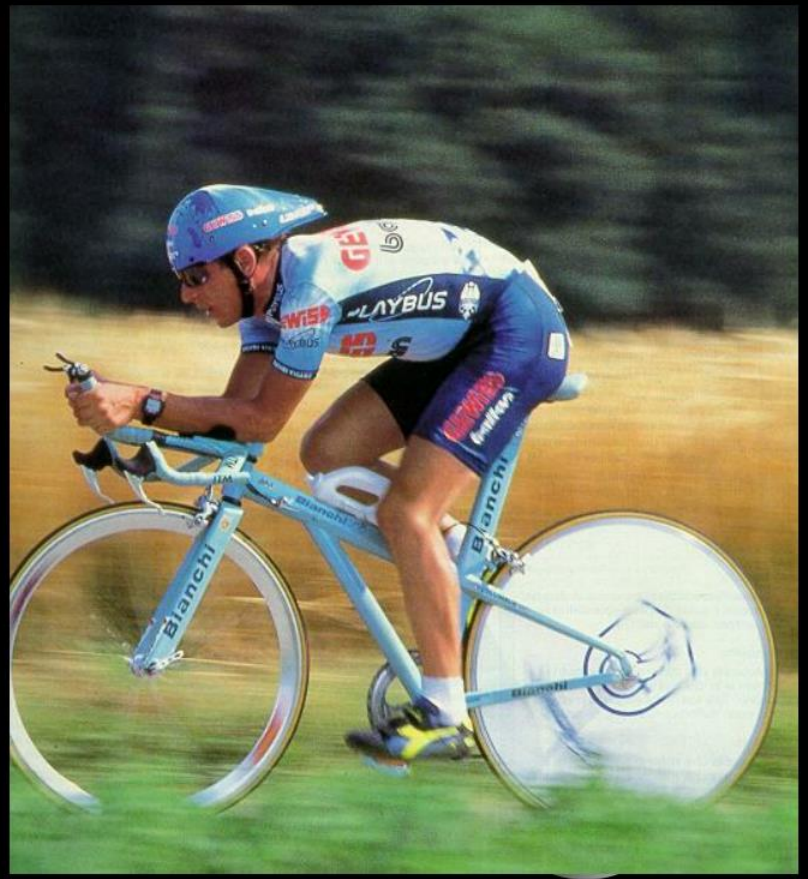
Medico di Famiglia:

- *Scambio di informazioni riguardo il tipo di intervento*



Secondo mese Attività Consentite

- Guidare
- Nuoto
- Bicicletta
- Lavori leggeri



Terzo mese Attività Consentite

- Ripresa Attività lavorative pesante

- Praticare Attività Sportiva

LE VIE DI ACCESSO NELLE PROTESI PRIMARIE
LE OPINIONI E I DETTAGLI TECNICI: COME E PERCHÉ

GRAZIE

D. Dallari, R. Civinini, G. Logroscino

GIOVEDÌ
19 SETTEMBRE 2019

11.05 La via laterale diretta: è ancora attuale?
11.12 **Filippo Casella** (Roma)

11.12 Discussione
11.35

FATTI, IPOTESI E ILLUSIONI

11.35 L'informazione al paziente: chi, come
11.45 **Luigi Zagra** (Milano)

11.45 La letteratura e i registri: sopravvivenza, complicanze
11.55 e risultati a medio lungo termine
Emilio Romanini (Roma)

11.55 Fate quello che fate bene... ma fatelo molto bene
12.00 **Francesco Benazzo** (Pavia)

ASL ROMA 1

AREA FUNZIONALE ORTOPEDIA **DIRETTORE F.FALEZ**

ROMA

CONGRESSO NAZIONALE DELLA
SOCIETÀ ITALIANA DELL'ANCA

www.societaitalianadellanca.eu

19-20
settembre 2019
BERGAMO
Presidente Onorario
Paolo Cherubino
Presidente
Claudio Carlo Castelli

LA VIA LATERALE DIRETTA E' ANCORA ATTUALE?

FILIPPO CASELLA

PROGRAMMA

GIOVEDÌ 19 SETTEMBRE 2019

AUDITORIUM

10.30 **SIMPOSIO 1: LE VIE DI ACCESSO NELLE PROTESI PRIMARIE**
12.00 Moderatori: **Vincenzo Salini** (Milano), **Giovanni Zatti** (Monza)
Anchorman: **Francesco Benazzo** (Pavia)

10.30 LE OPINIONI E I DETTAGLI TECNICI: COME E PERCHÉ
11.05 Via anteriore diretta - **Dante Dallari** (Bologna)
Via antero laterale - **Roberto Civinini** (Firenze)
Via postero laterale - **Giandomenico Logroscino** (L'Aquila)

10.30 Set-up: letto chirurgico , posizione del paziente e supporti
10.36 **Dante Dallari** (2')
Roberto Civinini (2')
Giandomenico Logroscino (2')

10.36 Esposizione acetabolare : circonferenziale o buco della serratura?
10.42 **Dante Dallari** (2')
Roberto Civinini (2')
Giandomenico Logroscino (2')

10.42 Esposizione femore prossimale: risparmio trocanterico e abduttori,
10.51 accesso e preparazione canale midollare
Dante Dallari (3')
Roberto Civinini (3')
Giandomenico Logroscino (3')

Verifica intraoperatoria lungh[illegible]t
Dante Dallari (2')
Roberto Civinini (2')
Giandomenico Logroscin[illegible]

[illegible]mplificatore di brillanz[illegible]
[illegible]nte Dallari (30")
[illegible]erto Civinini (30")
[illegible]domenico Logro[illegible]

[illegible]ttura capsulare (no[illegible]
[illegible]ante Dallari (1')
[illegible]oberto Civinini (1')
[illegible]iandomenico Logrosc[illegible]

[illegible] Dante Dallari (1')
[illegible]
Giandomenico Logroscino (1')

GIOVEDÌ 19 SETTEMBRE 2019

10.30 **SIMPOSIO 1: LE VIE DI ACCESSO NELLE PROTESI PRIM[illegible]**
12.00 (cont.)

11.05 La via laterale diretta: è ancora attuale?
11.12 **Filippo Casella** (Roma)

11.12 Discussione
11.35

FATTI, IPOTESI E ILLUSIONI

11.35 L'informazione al paziente: chi, come
11.45 **Luigi Zagra** (Milano)

11.45 La letteratura e i registri: sopravvivenza, complicanze
11.55 e risultati a medio lungo termine
Emilio Romanini (Roma)

11.55 Fate quello che fate bene... ma fa[illegible]lo molto bene
12.00 **Francesco Benazzo** (Pavia)

SALA A

12.00 **SIMPOSIO AZIENDALE**
13.00 **LINK&HERAEUS & MEDICAD**
(vedi pagina 34)

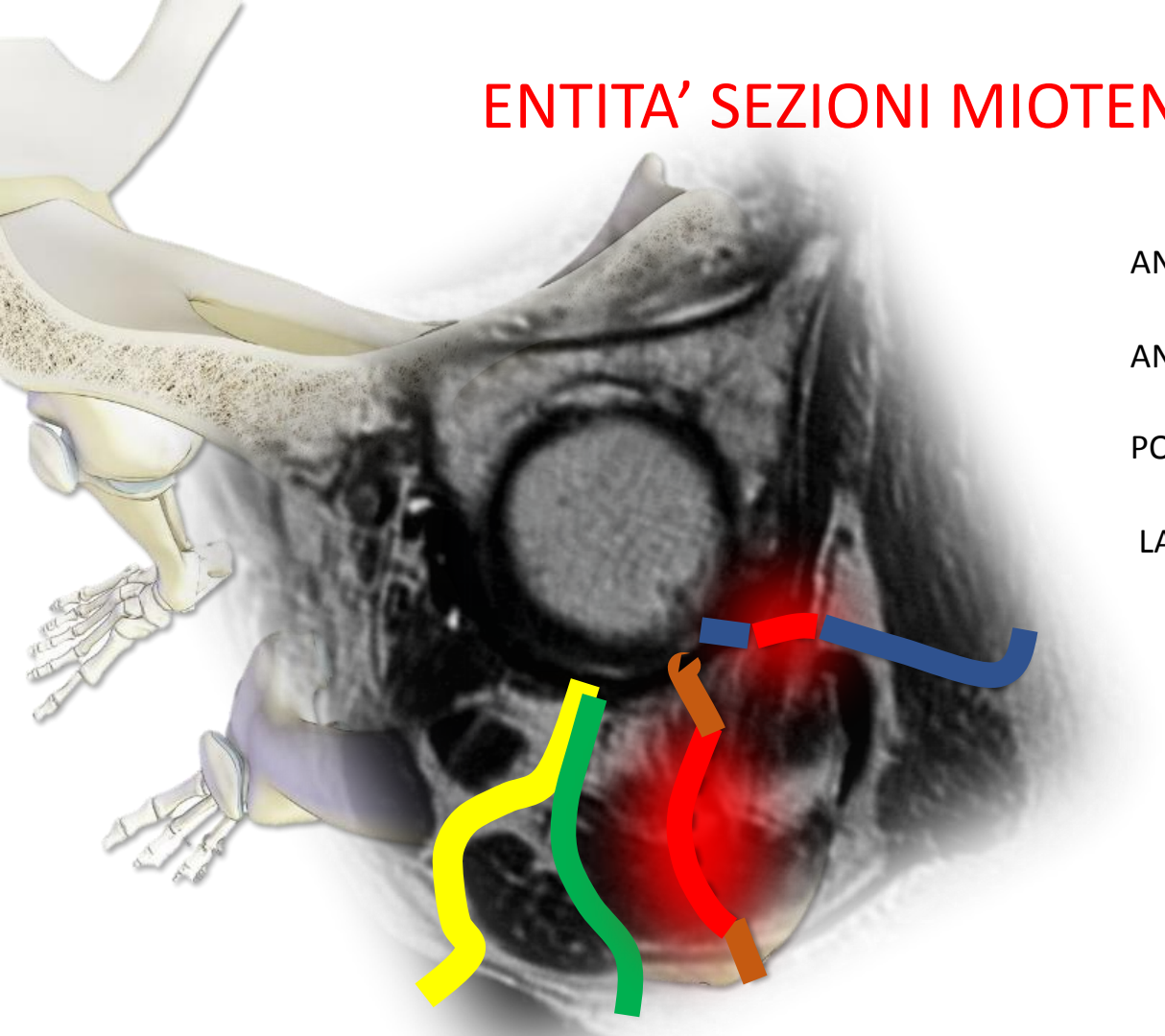
SALA B

12.00 **WORKSHOP AZIENDALE**
12.30 **NORMEDITEC**
(vedi pagina 34)

13.00 Lunch
13.30

QUAL'E' IL PERCHE' DI QUESTO DIFFERENTE APPEAL?

ENTITA’ SEZIONI MIOTENDINEE



ANTERIORE

ANTEROLAT

POSTEROLAT

LATERALE

DEAMBULAZIONE PROTETTA

Acta Orthopaedica
The Official Publication of the Nordic Orthopedic Federation

Worse patient-reported outcome after lateral approach than after anterior and posterolateral approach in primary hip arthroplasty

A cross-sectional questionnaire study of 1,476 patients 1–3 years after surgery

Einar Arnlio[1], Leif I Havelin[2,3], Ove Furnes[2,3], Valborg Baste[3], Lars Nordsletten[4], Oystein Hovik[1], and Sigbjorn Dimmen[1,4]

[1]Lovisenberg Diakonale Hospital, Orthopaedic Department, Oslo; [2]Department of Clinical Medicine, University of Bergen; [3]The Norwegian Arthroplasty Register, Department of Orthopaedic Surgery, Haukeland University Hospital, Bergen; [4]Oslo University Hospital, University of Oslo, Oslo, Norway
Correspondence: eanrhlio@gmail.com
Submitted 13-08-20. Accepted 14-04-13

Background — The surgical approach in total hip arthroplasty (THA) is often based on surgeon preference and local traditions. The anterior muscle-sparing approach has recently gained popularity in Europe. We tested the hypothesis that patient satisfaction, pain, function, and health-related quality of life (HRQoL) after THA is not related to the surgical approach.

Patients — 1,476 patients identified through the Norwegian Arthroplasty Register were sent questionnaires 1–3 years after undergoing THA in the period from January 2008 to June 2010. Patient-reported outcome measures (PROMs) included the hip disability osteoarthritis outcome score (HOOS), the Western Ontario and McMaster Universities osteoarthritis index (WOMAC), health-related quality of life (EQ-5D-3L), visual analog scales (VAS) addressing pain and satisfaction, and questions about complications. 1,273 patients completed the questionnaires and were included in the analysis.

Results — Adjusted HOOS scores for pain, other symptoms, activities of daily living (ADL), sport/recreation, and quality of life were significantly worse ($p < 0.001$ to $p = 0.03$) for the lateral approach than for the anterior approach and the posterolateral approach (mean differences: 3.2–5.8). These results were related to more patient-reported limping with the lateral approach than with the anterior and posterolateral approaches (25% vs. 12% and 13%, respectively; $p < 0.001$).

Interpretation — Patients operated with the lateral approach reported worse outcomes 1–3 years after THA surgery. Self-reported limping occurred twice as often in patients who underwent THA with a lateral approach than in those who underwent THA with an anterior or posterolateral approach. There were no significant differences in patient-reported outcomes after THA between those who underwent THA with a posterolateral approach and those who underwent THA with an anterior approach.

DOI 10.3109/17453674.2014.936281

The approach used for total hip arthroplasty (THA) is often based on the surgeon's preference and local traditions. In 2011, 7,360 primary THAs were reported to the Norwegian Arthroplasty Register (NAR) (Norwegian Arthroplasty Register Annual Report 2012). A lateral approach was used in 51% of the operations, the posterolateral approach in 28%, and an anterior approach in 16%. Anterior muscle-sparing approaches have gained popularity because it has been argued that patients with such surgical approaches have less pain, shorter length of stay, and shorter rehabilitation time. These are short-term effects (Rodrigues et al. 2014), and the long-term effects are not well-documented.

The anterior approaches used in Norway are either a modified Smith-Petersen approach (Smith-Petersen 1949, Judet and Judet 1950) or an anterolateral Watson-Jones approach (Watson-Jones 1936). These may have a longer learning curve (Greidanus et al. 2013) and a higher incidence of early revision (Sparmann et al. 2012, Lindgren et al. 2012). The lateral approach (Hardinge 1982) divides the anterior portion of gluteus medius and minimus. Muscular-tendon suture or osteosuture is used to reconnect the tendon into the trochanteric area. This approach has been blamed for increasing the risk of damage to the superior gluteal nerve and to the gluteus medius muscle (Jolles and Bogoch 2006, Arthursson et al. 2007, Khan and Knowles 2007).

The posterolateral approach involves division of the piriformis, obturator internus, and gemelli tendons (Pellicci et al. 1998). This approach is considered to have less effect on gait since the abductor muscles are not dissected (Shaw 1991, Hedlundh et al. 1993), but it has been associated with an increased risk of dislocations, with risk of injury to the sciatic nerve. More recent studies have shown that use of larger femoral head sizes can markedly reduce the dislocation rate (Amlie et al. 2010, Hendolt et al. 2011, Ho et al. 2012).

riap

Registro Italiano ArtroProtesi

REPORT ANNUALE 2018

VIA LATERALE IN ITALIA?

G.L.O.B.E.

Tabella 2.6. Anca. Numero di interventi per caratteristiche dell'intervento chirurgico (lato operato, via di accesso) e per tipo di intervento

	Sostituzione totale				Sostituzione parziale		Revisione (*)		TOTALE	
	in elezione		in urgenza							
	N	%	N	%	N	%	N	%	N	%
Lato operato	**23.034**		**3.015**		**7.915**		**1.795**		**35.759**	
Destro	12.573	*54,6*	1.523	*50,5*	4.008	*50,6*	963	*53,6*	19.067	*53,3*
Sinistro	10.025	*43,5*	1.488	*49,4*	3.889	*49,1*	824	*45,9*	16.226	*45,4*
Bilaterale	436	*1,9*	4	*0,1*	18	*0,2*	8	*0,4*	466	*1,3*
Via di accesso	**23.034**		**3.015**		**7.915**		**1.795**		**35.759**	
Anteriore	3.992	*17,3*	155	*5,1*	346	*4,4*	112	*6,2*	4.605	*12,9*
Antero-Laterale	2.385	*10,4*	590	*19,6*	1.696	*21,4*	250	*13,9*	4.921	*13,8*
Laterale	4.293	*18,6*	921	*30,5*	2.743	*34,7*	465	*25,9*	8.422	*23,6*
Postero-Laterale	12.083	*52,5*	1.342	*44,5*	3.113	*39,3*	957	*53,3*	17.495	*48,9*
Altro	281	*1,2*	7	*0,2*	17	*0,2*	11	*0,6*	316	*0,9*

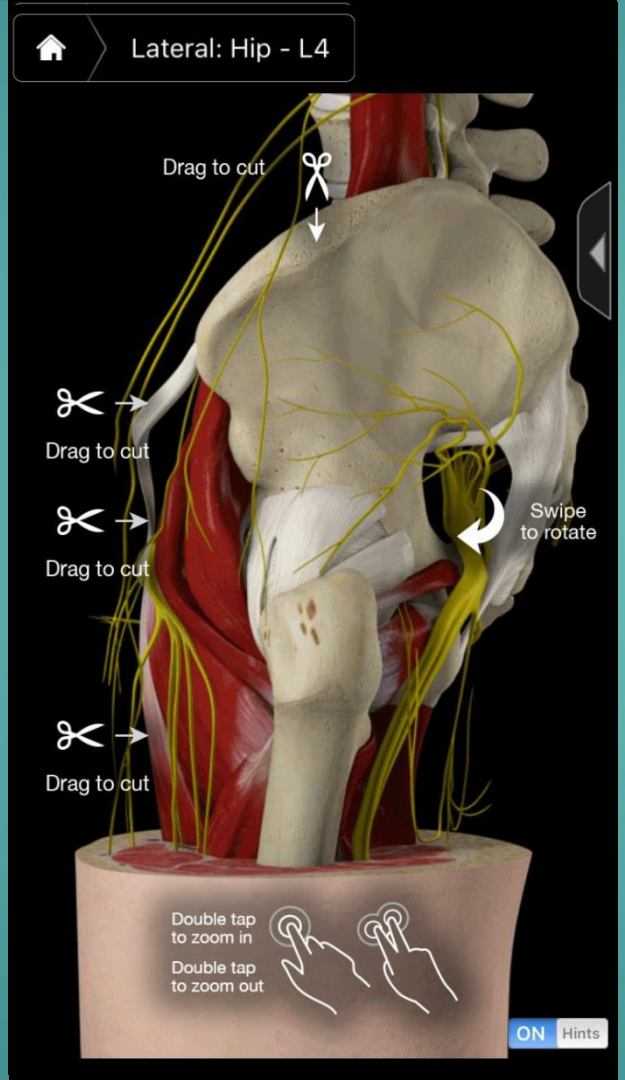
(*) Interventi di revisione totale o parziale, rimozione della protesi, conversione da endoprotesi ad artroprotesi, sostituzione spaziatore

Nota: alcuni dati potrebbero essere frutto di errori di codifica, come nel caso dell'intervento di protesi parziale che non prevede l'impianto del cotile

LA VIA LATERALE DIRETTA: E' ANCORA ATTUALE?

PERCHE’?

PERCHE'?



SEMPLICITA'?

HUNGERFORD 2000
MORE PRACTICAL AND APPEALING

Keep it simple...

PERCHE'?

RIDOTTO TASSO LUSSAZIONI PAI 1995

PIU' A RISCHIO SONO PROTESI SU FRATTURA

Tabella 2.6. Anca. Numero di interventi per caratteristiche dell'intervento chirurgico (lato operato e via di accesso) e per tipo di intervento

1 / 2	Sostituzione totale				Sostituzione parziale		Revisione (*)		TOTALE	
	in elezione		in urgenza							
	N	%	N	%	N	%	N	%	N	%
Lato operato	**23.034**		**3.015**		**7.915**		**1.795**		**35.759**	
Destro	12.573	54,6	1.523	50,5	4.008	50,6	963	53,6	19.067	53,3
Sinistro	10.025	43,5	1.488	49,4	3.889	49,1	824	45,9	16.226	45,4
Bilaterale	436	1,9	4	0,1	18	0,2	8	0,4	466	1,3
Via di accesso	**23.034**		**3.015**		**7.915**		**1.795**		**35.759**	
Anteriore	3.992	17,3	155	5,1	346	4,4	112	6,2	4.605	12,9
Antero-Laterale	2.385	10,4	590	19,6	1.696	21,4	250	13,9	4.921	13,8
Laterale	3	18,6	3	30,5	4	34,7	5	25,9	8.422	23,6
Postero-Laterale	12.083	52,5	1.342	44,5	3.113	39,3	957	53,3	17.495	48,9
Altro	281	1,2	7	0,2	17	0,2	11	0,6	316	0,9

(*) Interventi di revisione totale o parziale, rimozione della protesi, conversione da endoprotesi ad artroprotesi, sostituzione spaziatore
Nota: alcuni dati potrebbero essere frutto di errori di codifica, come nel caso dell'intervento di protesi parziale che non prevede l'impianto del cotile

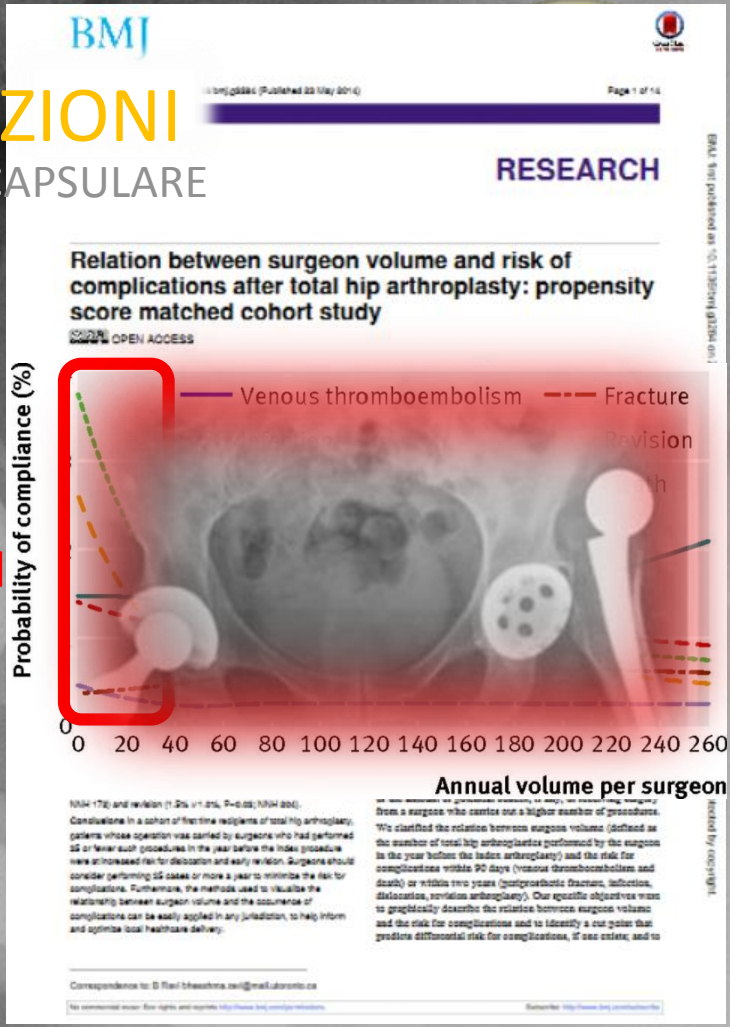
INSTABILITA’ PUO’ ESSERE FATALE

NECESSITA’ AUSILI «TOLLERATA»?

PERCHE'? RIDOTTO TASSO LUSSAZIONI

ANCHE IN ASSENZA DI RIPARAZIONE CAPSULARE

FORTE APPEAL PER PROTESIZZATORI OCCASIONALI



BMJ

RESEARCH

Relation between surgeon volume and risk of complications after total hip arthroplasty: propensity score matched cohort study

OPEN ACCESS


Società Italiana dell'Anca
FORTE APPEAL PER PROTESIZZATORI OCCASIONALI
ALTISSIMO VOLUME PROTESI
ALTO VOLUME PROTESI
ALTO VOLUME PROTESI
Ruolo della scuola

EVOLUZIONE DELLA VIA LATERALE

EVOLUZIONE DELLA VIA LATERALE

Table 1
Various modification of McFarland and Osb

	Hardinge[6]	Learmonth[3]	Mullike	Pai
[1] G-V flap	1/2	Complete	1/3	1/3
[2] Proximal Extension from trochanter	NS		3 cm	3 cm
[3] Anterior Osteotomy	–	–	–	–
[4] Capsule	R/E	E	E	R
[5] G-V flap Repair	T-T	T-B	T-T B-B	T-B

[1] G-V flap(Gluteus-vastus): Width of the anterior flap in relation to width of the muscle
[2] Proximal extension of the glutei split from the tip of the greater trochanter:(NS = Not specified)
[3] Anterior Osteotomy: Flap is elevated with a piece of trochanter
[4] Capsule R/E = Retained or Excised
[5] G-V flap repair: T-T = Tendon to tendon repair; T-B = Tendon (flap) to the bone with bone stitches; B-B = Bone to bone following trochanteric osteotomy

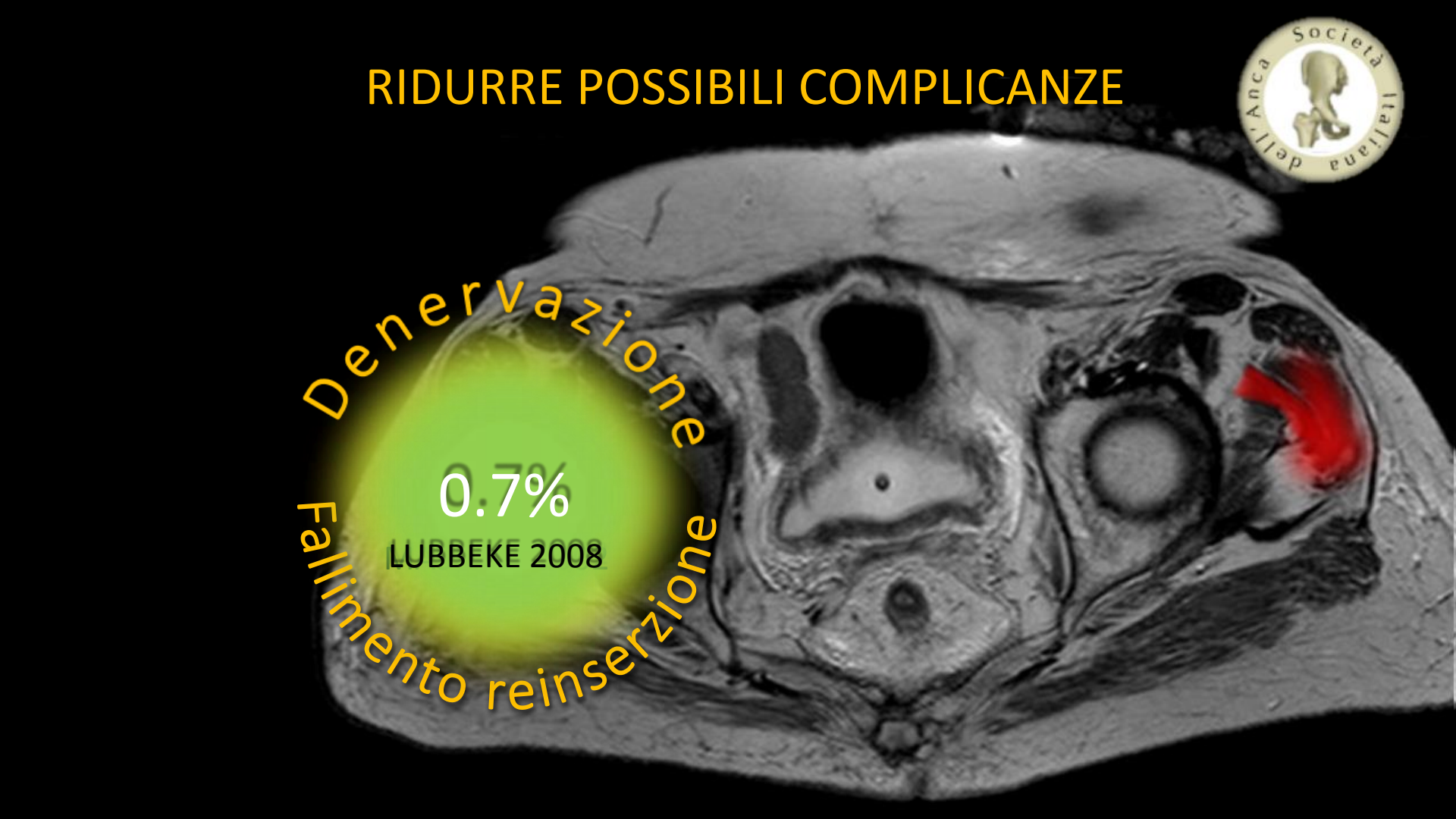
EVOLUZIONE DELLA VIA LATERALE

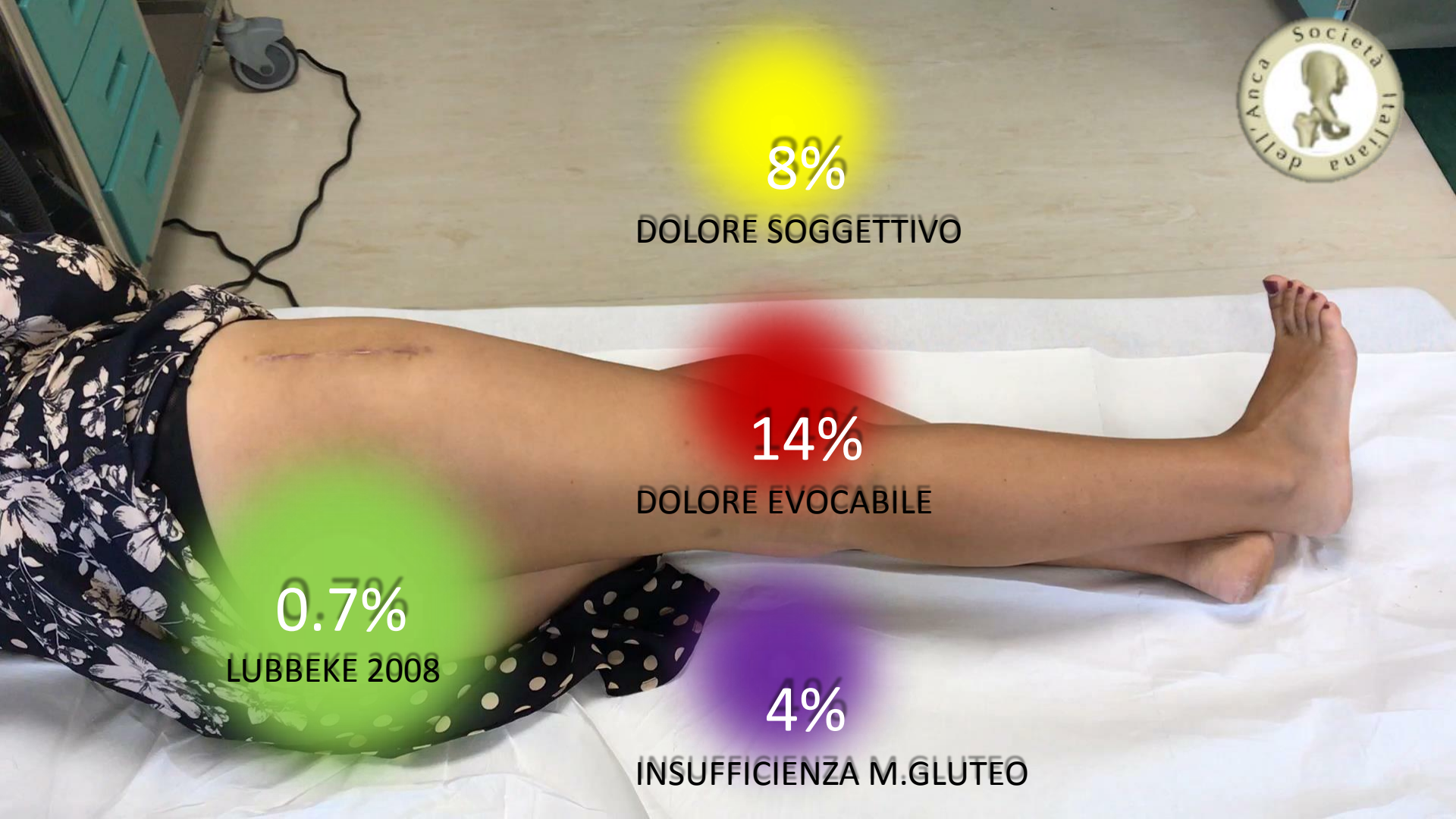
Table 1
Various modification of McFarland and Osborne lateral approach to the hip

	Hardinge[6]	Learmonth[8]	Mulliken[13]	Dall[2]	McLauchan[11]	Pai
[1] G-V flap	1/2	Complete	1/3	1/2	1/2	1/3
[2] Proximal Extension from trochanter	NS		3 cm	2 cm	NS	3 cm
[3] Anterior Osteotomy	–		–	+	+	–
[4] Capsule	R/E		E			R
[5] G-V flap Repair	T-T		T-T			T-B

[1] G-V flap(Gluteus-vastus [illegible] flap in relation to width of [illegible] muscle
[2] Proximal extension of the glutei split from the tip of the greater trochanter.(NS = Not specified)
[3] Anterior Osteotomy: Flap is elevated with a piece of trochanter
[4] Capsule R/E = Retained or Excised
[5] G-V flap repair: T-T = Tendon to tendon repair; T-B = Tendon (flap) to the bone with bone stitches; B-B = Bone to bone following trochanteric osteotomy

RIDURRE POSSIBILI COMPLICANZE




8%
DOLORE SOGGETTIVO
14%
DOLORE EVOCABILE
0.7%
LUBBEKE 2008
4%
INSUFFICIENZA M.GLUTEO


Società Italiana dell'Anca


Società
Italiana
dell'Anca

CONFRONTO

ANTERIORE*

ANT-LAT

POST-LAT

SIMPOSIO 1: LE VIE DI ACCESSO NELLE PROTESI PRIMARIE
Moderatori: Vincenzo Salini (Milano), Giovanni Zatti (Monza)
Anchorman: Francesco Benazzo (Pavia)

GIOVEDÌ 19 SETTEMBRE 2019

10.30 Set-up: letto chirurgico , posizione del paziente e supporti
Dante Dallari (2'),
Roberto Civinini (2'),
Giandomenico Logroscino (2')

10.42 Esposizione femore prossimale: risparmio trocanterico e abduttori, accesso e preparazione canale midollare
10.51 **Dante Dallari (3'),**
Roberto Civinini (3'),
Giandomenico Logroscino (3')

Dante Dallari (30"),
Roberto Civinini (30"),
Giandomenico Logroscino (30")

10.59 Sutura capsulare (no,sì e come)
11.02 **Dante Dallari (1'),**
Roberto Civinini (1'),
Giandomenico Logroscino (1')

11.02 Regime e restrizioni post operatorie immediate (no, sì e quali)
11.05 **Dante Dallari (1'),**
Roberto Civinini (1'),
Giandomenico Logroscino (1')

GIOVEDÌ 19 SETTEMBRE 2019

10.30 SIMPOSIO 1: LE VIE DI ACCESSO NELLE PROTESI PRIMARIE
12.00 (cont.)

11.05
11.12

SALA A

13.00 LINK&HERAEUS
(vedi pagina 34)

12.00 WORKSHOP AZIENDALE
12.30 NORMEDITEC
(vedi pagina 34)

13.00 Lunch
13.30

Scelta impianto*

Piu' maneggevole

Learning curve

Più tollerante

Rischio lussazione inferiore


GRAZIE


CONGRESSO NAZIONALE DELLA
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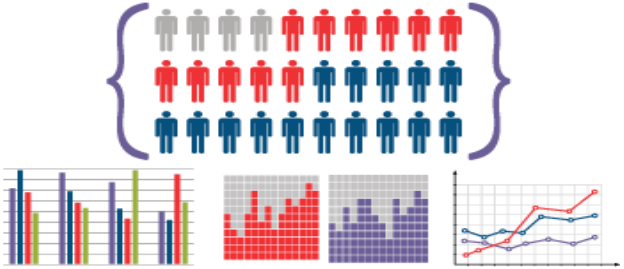
19-20
settembre 2019
BERGAMO
Presidente Onorario
Paolo Cherubino
Presidente
Claudio Carlo Castelli
PROGRAMMA

La letteratura e i registri: sopravvivenza, complicanze e risultati a medio lungo termine

Emilio Romanini (Roma)

artrogruppo chirurgia ortopedica G.L.O.B.E.



- Epidemiologia descrittiva
- Sopravvivenza
- PROMS
- Complicanze
- Riflessioni…

Epidemiologia descrittiva

Tabella 2.6. Anca. Numero di interventi per caratteristiche dell'intervento chirurgico (lato operato e via di accesso) e per tipo di intervento

	Sostituzione totale				Sostituzione parziale		Revisione (*)		TOTALE	
	in elezione		in urgenza							
	N	%	N	%	N	%	N	%	N	%
Via di accesso	**23.034**		**3.015**		**7.915**		**1.795**		**35.759**	
Anteriore	3.992	*17,3*	155	*5,1*	346	*4,4*	112	*6,2*	4.605	*12,9*
Antero-Laterale	2.385	*10,4*	590	*19,6*	1.696	*21,4*	250	*13,9*	4.921	*13,8*
Laterale	4.293	*18,6*	921	*30,5*	2.743	*34,7*	465	*25,9*	8.422	*23,6*
Postero-Laterale	12.083	*52,5*	1.342	*44,5*	3.113	*39,3*	957	*53,3*	17.495	*48,9*
Altro	281	*1,2*	7	*0,2*	17	*0,2*	11	*0,6*	316	*0,9*

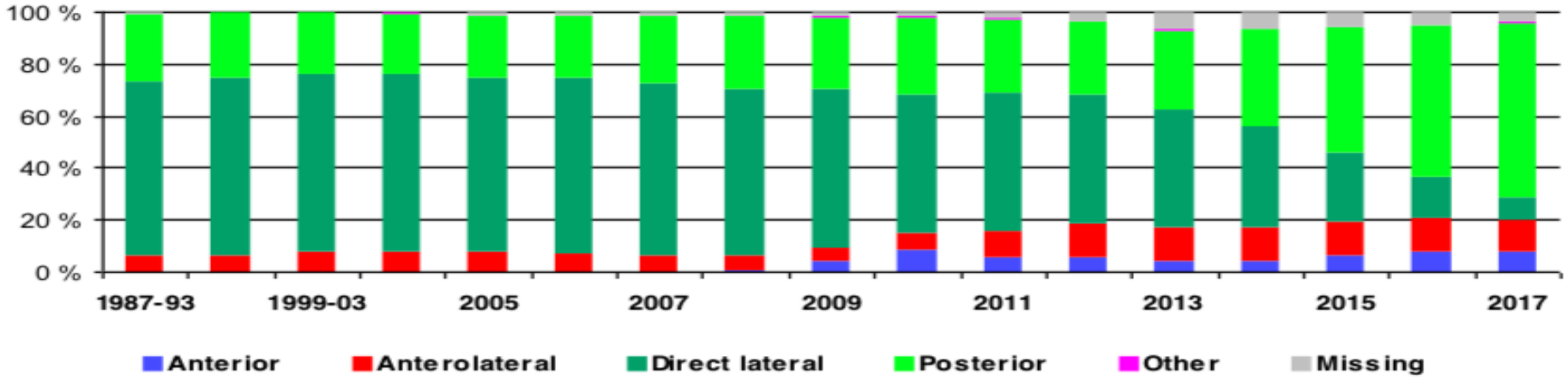


Table 9: In primary operations *

Year	Anterior	Anterolateral	Direct lateral	Posterior	Other	Missing information	Total
2017	692 (7,6 %)	1 162 (12,8 %)	743 (8,2 %)	6 139 (67,5 %)	5 (0,1 %)	356 (3,9 %)	**9 097**
2016	713 (8 %)	1 162 (13 %)	1 432 (16 %)	5 160 (57,8 %)	5 (0,1 %)	459 (5,1 %)	**8 931**
2015	520 (6,2 %)	1 147 (13,6 %)	2 234 (26,5 %)	4 080 (48,3 %)	3 (0 %)	458 (5,4 %)	**8 442**
2014	337 (4,1 %)	1 059 (13 %)	3 174 (39 %)	3 015 (37,1 %)	17 (0,2 %)	530 (6,5 %)	**8 132**
2013	342 (4,2 %)	1 081 (13,3 %)	3 626 (44,8 %)	2 472 (30,5 %)	24 (0,3 %)	553 (6,8 %)	**8 098**
2012	438 (5,6 %)	1 023 (13 %)	3 919 (49,9 %)	2 192 (27,9 %)	12 (0,2 %)	263 (3,4 %)	**7 847**
2011	429 (5,8 %)	748 (10,2 %)	3 897 (52,9 %)	2 081 (28,3 %)	30 (0,4 %)	175 (2,4 %)	**7 360**
2010	625 (8,5 %)	470 (6,4 %)	3 918 (53,5 %)	2 154 (29,4 %)	48 (0,7 %)	115 (1,6 %)	**7 330**
2009	326 (4,6 %)	340 (4,8 %)	4 357 (61,2 %)	1 963 (27,6 %)	11 (0,2 %)	118 (1,7 %)	**7 115**
2008	68 (1 %)	387 (5,7 %)	4 360 (63,7 %)	1 927 (28,1 %)	8 (0,1 %)	98 (1,4 %)	**6 848**
2007	14 (0,2 %)	404 (6,1 %)	4 417 (66,3 %)	1 711 (25,7 %)	10 (0,2 %)	104 (1,6 %)	**6 660**
2006	2 (0 %)	452 (7,2 %)	4 270 (67,6 %)	1 482 (23,5 %)	3 (0 %)	110 (1,7 %)	**6 319**
2005	7 (0,1 %)	521 (7,9 %)	4 419 (67 %)	1 534 (23,3 %)	4 (0,1 %)	112 (1,7 %)	**6 597**
2004	8 (0,1 %)	462 (7,4 %)	4 285 (68,9 %)	1 437 (23,1 %)	6 (0,1 %)	20 (0,3 %)	**6 218**
1999-03	52 (0,2 %)	2 312 (7,6 %)	0 925 (68,5 %)	7 112 (23,3 %)	36 (0,1 %)	113 (0,4 %)	**30 550**
1994-98	33 (0,1 %)	1 633 (6,5 %)	7 117 (68 %)	6 306 (25 %)	15 (0,1 %)	78 (0,3 %)	**25 182**
1987-93	104 (0,4 %)	1 853 (6,3 %)	9 632 (66,6 %)	7 628 (25,9 %)	25 (0,1 %)	240 (0,8 %)	**29 482**
Total	**4 710 (2,5 %)**	**16 216 (8,5 %)**	**06 725 (56,1 %)**	**58 393 (30,7 %)**	**262 (0,1 %)**	**3 902 (2,1 %)**	**190 208**

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Nasjonalt Register for Leddproteser

Number of primary total hip arthroplasties per type of surgical approach and year

2000–2017

Type of surgical approach	2000–2012	2013	2014	2015	2016	2017	Total[1)]	%[2)]
Posterior approach in lateral position (Moore)	98 525	8 507	8 469	8 680	9 307	9 763	44 726	52.7
Direct lateral approach in lateral position (Gammer)	67 582	6 817	7 083	6 804	6 824	6 884	34 412	40.5
Direct lateral approach in supine position (Hardinge)	12 312	851	846	1 074	1 026	1 270	5 067	6.0
Other	1 536	170	163	71	95	192	691	0.8
(missing)	2 812	5	2	2	11	31	51	0.1
Total	182 767	16 350	16 563	16 631	17 263	18 140	84 947	100

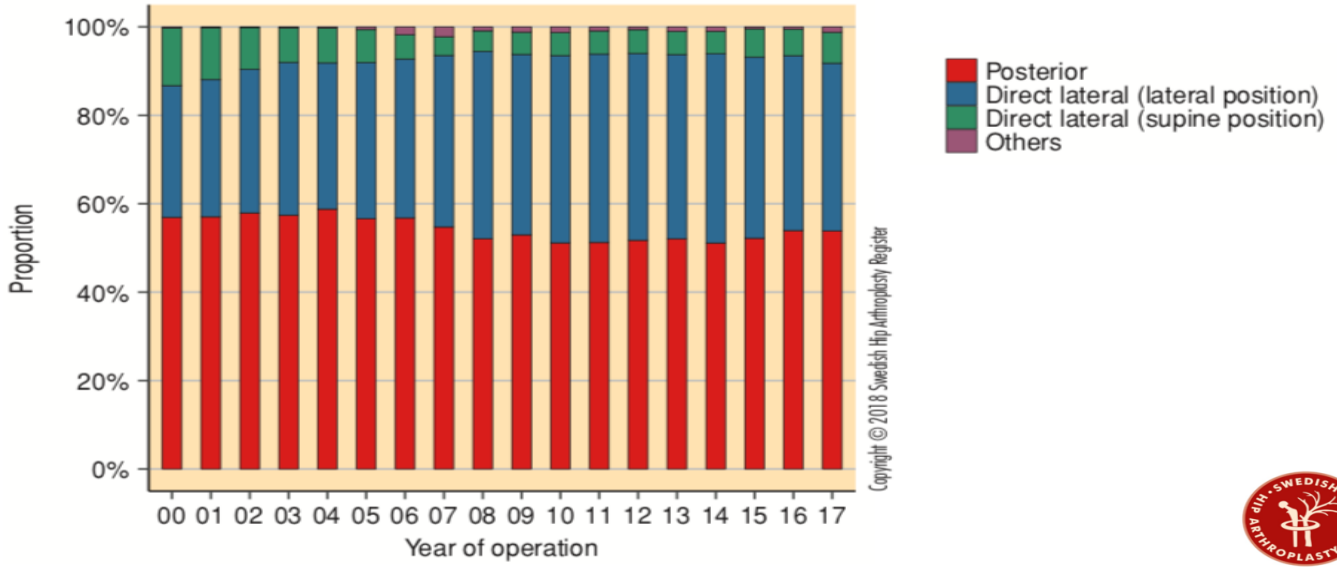
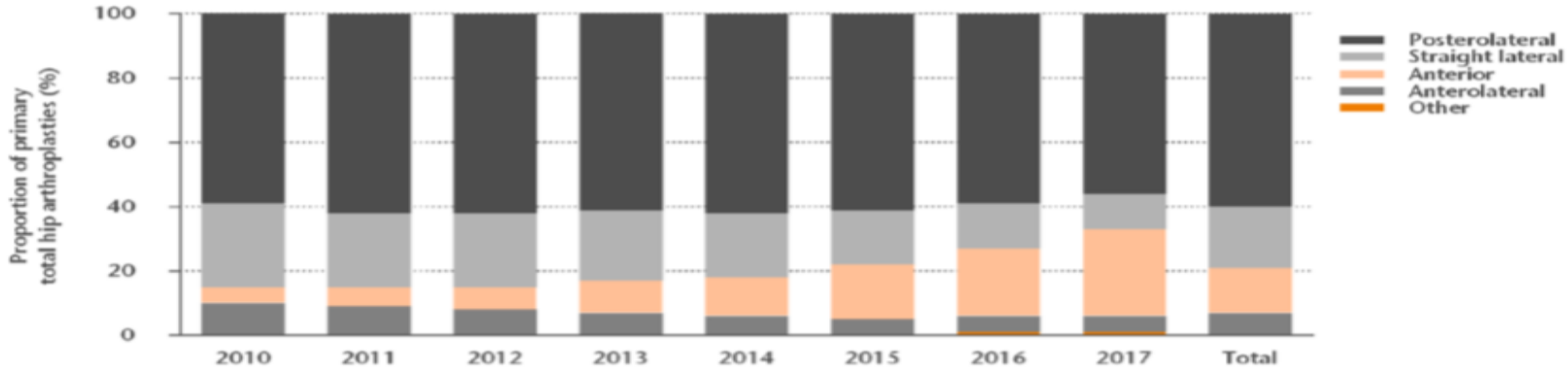


FIGURE TREND (PROPORTION [%] PER YEAR) IN SURGICAL APPROACH FOR PERFORMING A PRIMARY TOTAL HIP ARTHROPLASTY IN THE NETHERLANDS IN 2010-2017.



Year	2010	2011	2012	2013	2014	2015	2016	2017	Total
Surgical approach									
Posterolateral (%)	59.6	62.3	62.1	61.6	62.0	60.7	59.2	56.0	60.3
Straight lateral (%)	25.7	23.3	23.1	21.8	20.2	17.0	13.6	10.7	19.0
Anterior (%)	4.7	5.6	6.8	9.9	12.3	16.8	20.9	27.3	13.7
Anterolateral (%)	9.6	8.6	7.9	6.6	5.4	5.1	5.5	5.0	6.6
Other (%)	0.4	0.2	0.1	0.1	0.1	0.4	0.8	1.0	0.4
Total (n)	23,144	23,677	25,177	25,955	28,017	28,797	29,646	29,914	214,327

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Swiss National Joint Registry

SIRIS Report 2012–2016
Annual Report of the Swiss National Joint Registry, Hip and Knee

Primary total hip arthroplasty: Surgical approach by year

Approach data only available from 2015 onwards

Surgical approach	2015		2016	
	N	%	N	%
Anterior	7193	41.6	7965	43.7
Anterolateral	5759	33.3	5976	32.8
Lateral	1442	8.3	1403	7.7
Posterior	2665	15.4	2739	15.0
Other approach	215	1.2	149	0.8
Total	**17274**	100	**18232**	100

Approach of revision of total hip arthroplasty

Data only available from 2015 onwards

Approach of revision	2015–2016	
	N	%
Posterior	1646	33.3
Lateral	1227	24.8
Anterolateral	868	17.6
Anterior	744	15.1
Transfemoral	250	5.1
Other approach	208	4.2

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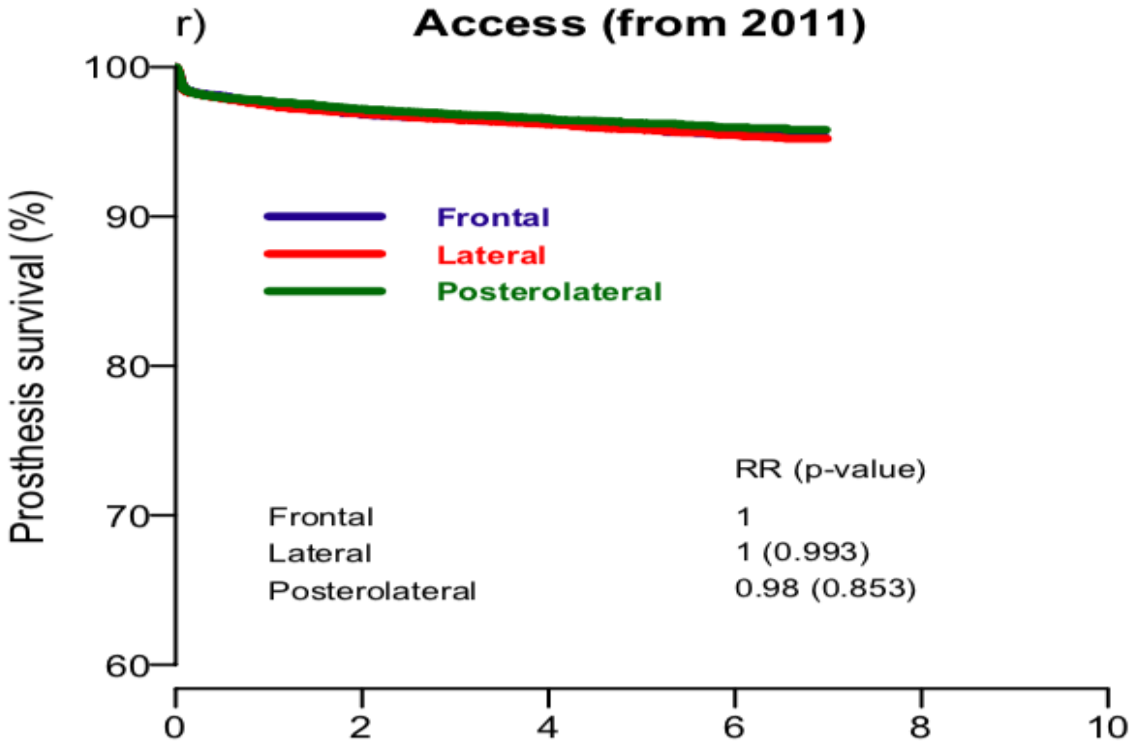
Sopravvivenza

Survival of total hip prosthesis, 2007-2017

NASJONAL KOMPETANSETJENESTE
for leddproteser og hoftebrudd

REPORT
June 2018

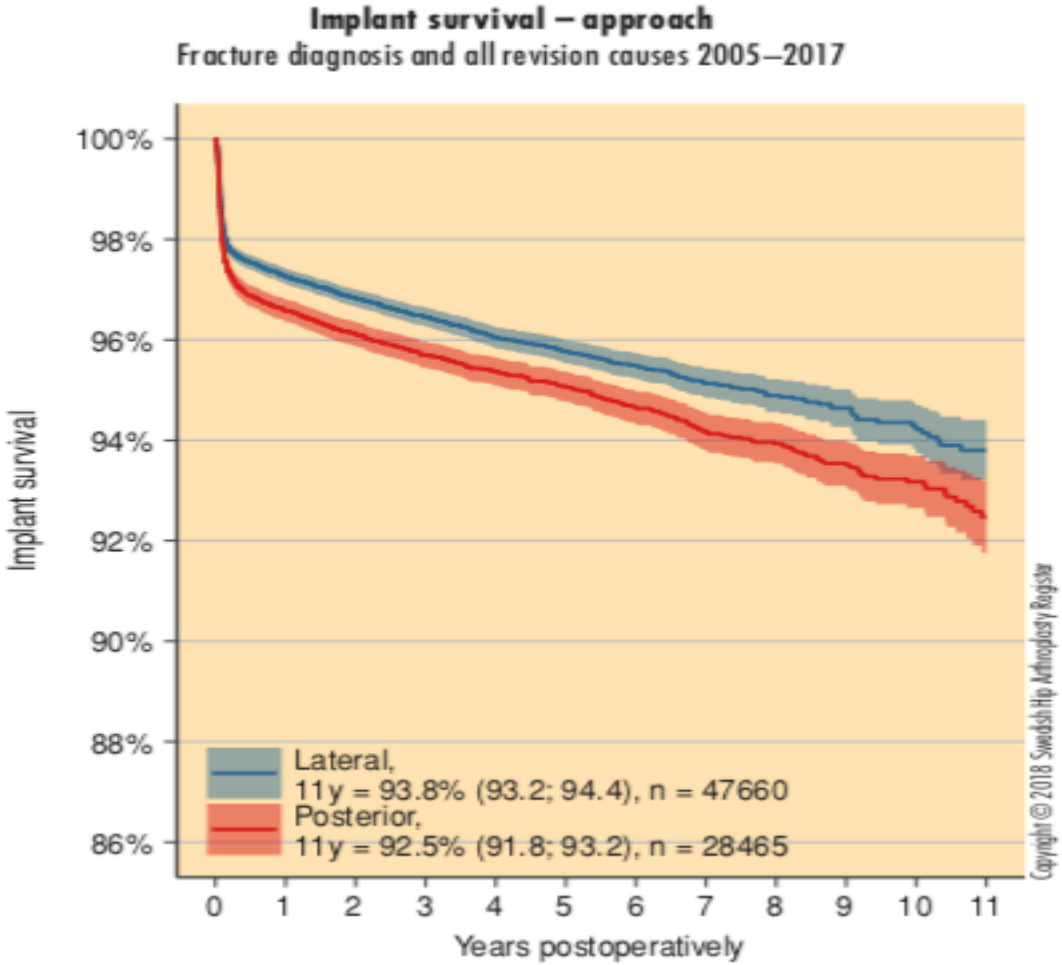


artroruppo chirurgia ortopedica G.L.O.B.E.

Demographics, fixation method and proportion of reoperated patiens in relation to surgical approach

2000–2017

Surgical approach	Number	Proportion of women, %	Proportion of primary osteoarthritis, %	Proportion of operations with uncemented cup, %	Proportion of operations with uncemented stem, %	Proportion reoperated, %
Posterior approach in lateral position (Moore)	143 251	57.5	81.5	16.7	20.7	2.1
Direct lateral						
Lateral position (Gammer)	101 994	59.8	77.7	19.7	24.0	2.3
Supine position (Hardinge)	17 379	63.5	76.6	4.6	25.0	2.2
Mini-approach						
MIS/1-approach front	796	62.7	86.3	69.6	66.2	3.6
MIS/1-approach, back	415	53.7	76.9	48.9	53.7	2.7
MIS/2-approach	46	47.8	82.6	54.3	60.9	6.6
Watson-Jones (original)	479	53.7	77.5	44.7	56.8	2.5
Trochanter osteotomy						
Direct lateral	439	61.3	66.1	25.3	31.7	3.3
OCM-approach	52	30.8	92.3	90.4	94.2	1.9
No data	2 863	60.4	68.2	16.5	11.3	2.6



artrogruppo chirurgia ortopedica G.L.O.B.E.

An international comparison of THA patients, implants, techniques, and survivorship in Sweden, Australia, and the United States

Elizabeth W PAXTON [1,3], Guy CAFRI [1], Szilard NEMES [2,3], Michelle LORIMER [5], Johan KÄRRHOLM [2,3,4], Henrik MALCHAU [2,3,4], Stephen E GRAVES [5], Robert S NAMBA [6], and Ola ROLFSON [2,3,4]

Surgical techniques

Although the posterior approach was used most frequently in all 3 countries, Sweden did not utilize the direct anterior approach. Several systematic reviews and registry studies suggest that the anterior approach is associated with lower dislocation and revision rates (Barrett et al. 2013, Higgins et al. 2015, Sheth et al. 2015, Miller et al. 2018a, b). However, these studies focused on short-term and functional outcomes without any certain conclusions concerning longer term revision rates. Despite differences in surgical approaches, Sweden had lower THA revision rates than the US cohort and Australia.

PROMS

General Orthopaedics

EOR | VOLUME 4 | JUNE 2019
DOI: 10.1302/2058-5241.4.180080
www.efortopenreviews.org

EFORT open reviews

Orthopaedic registries with patient-reported outcome measures

Ian Wilson[1]
Eric Bohm[2]
Anne Lübbeke[3]
Stephen Lyman[4]
Søren Overgaard[5]
Ola Rolfson[6]
Annette W-Dahl[7]
Mark Wilkinson[8]
Michael Dunbar[9]

- While revision surgery is the traditional endpoint of registries, it is blunt and likely insufficient as a measure of success; PROMs address this shortcoming by expanding beyond survival and measuring outcomes that are relevant to patients – relief of pain, restoration of function and improvement in quality of life.

Qualità di vita e protesi di anca

Emilio Romanini (a), Ciro Villani (b), Marina Torre (c)
(a) Gruppo di Lavoro Ortopedia Basata sulle prove di Efficacia, Roma
(b) Dipartimento di Scienze dell'Apparato Locomotore, Università degli Studi di Roma "La Sapienza", Roma
(c) Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, Istituto Superiore di Sanità, Roma

artrogruppo chirurgia ortopedica G.L.O.B.E.

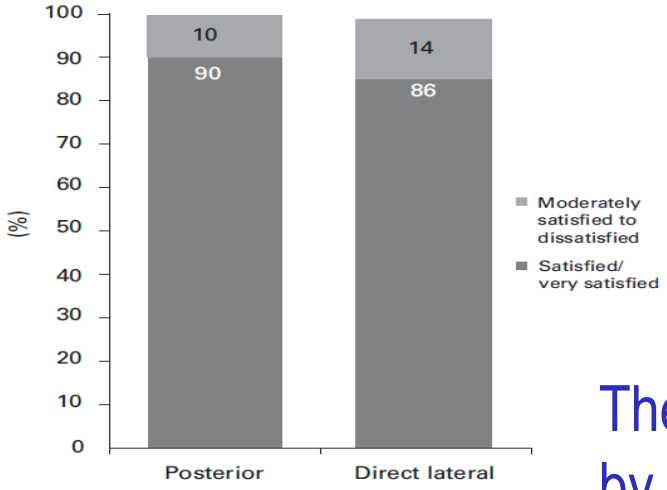
Romanini 2005, Wilson 2019

THE BONE & JOINT JOURNAL

■ HIP

Patient-reported outcome is influenced by surgical approach in total hip replacement

A STUDY OF THE SWEDISH HIP ARTHROPLASTY REGISTER INCLUDING 42 233 PATIENTS



The results indicate that some patients operated by the direct lateral approach report an inferior outcome compared with the posterior approach.

Lindgren Bone Joint J 2014

A Comparison of Surgical Approaches for Primary Hip Arthroplasty: A Cohort Study of Patient Reported Outcome Measures (PROMs) and Early Revision Using Linked National Databases

Simon S. Jameson, MRCS [a,b], James Mason, DPhil, MSc BSc(Hons) [a], Paul Baker, MSc, FRCS (Tr&Orth) [a,b], Paul J. Gregg, FRCS, Ed (Orth) [a,b,c], Ian A. McMurtry, FRCS, (Tr&Orth) [a,c], David J. Deehan, MD, MSc, FRCS (Tr&Orth) [a,d], Mike R. Reed, MD, FRCS(Tr&Orth) [a,e]

Patient Reported Outcomes for Populations Studied, by Surgical Approach.

	Cemented (Exeter V40/Contemporary Flanged 28 mm)			Cementless (Corail/Pinnacle MoM/CoC 36 mm)		
	Posterior	Lateral	*P* Value	Posterior	Lateral	*P* Value
Number (%)	1121 (57.9)	816 (42.1)		1266 (65.1)	678 (34.9)	
Oxford Hip scores						
Pre-operative, mean (sd, range)	18.9 (8.0, 0 to 44)	17.4 (7.8, 2 to 43)	<0.001	19.3 (8.1, 0 to 46)	18.6 (8.2, 1 to 42)	0.078
Post-operative, median (range)	42 (4 to 48)	39 (0 to 48)	<0.001	44 (2 to 48)	43 (5 to 48)	0.004
EQ5D visual analogue score						
Pre-operative, mean (sd, range)	68.7 (19.3, 4 to 100)	65.9 (20.2, 0 to 100)	0.003	66.8 (20.3, 0 to 100)	66.6 (21.0, 0 to 100)	0.848
Post-operative, mean (sd, range)	77.4 (16.7, 0 to 100)	73.0 (19.3, 0 to 100)	<0.001	78.5 (17.9, 0 to 100)	76.4 (17.6, 15 to 100)	0.015
EQ5D index						
Pre-operative, mean (sd, range)	0.393 (0.307, −0.358 to 1)	0.341 (0.313, −0.429 to 0.883)	<0.001	0.390 (0.316, −0.594 to 1)	0.377 (0.318, −0.239 to 1)	0.401
Post-operative, median (range)	0.815 (−0.003 to 1)	0.760 (−0.016 to 1)	<0.001	0.883 (−0.074 to 1)	0.812 (−0.077 to 1)	0.010
Satisfaction						
Excellent	454 (40.5)	249 (30.5)	<0.001	595 (47.0)	273 (40.3)	<0.001
Very good	395 (35.2)	290 (35.5)		442 (34.9)	228 (29.6)	
Good	212 (18.9)	192 (23.5)		160 (12.6)	121 (17.8)	
Fair	46 (4.1)	65 (8.0)		45 (3.6)	43 (6.3)	
Poor	14 (1.2)	20 (2.5)		25 (2.0)	13 (1.9)	
Success						
Much better	1003 (89.5)	669 (82.0)	<0.001	1136 (89.7)	584 (86.1)	0.131
A little better	86 (7.7)	102 (12.5)		81 (6.4)	60 (8.8)	
About the same	19 (1.7)	20 (2.5)		29 (3.6)	16 (2.4)	
A little worse	10 (0.9)	15 (1.8)		12 (1.5)	12 (1.8)	
Much worse	3 (0.3)	10 (1.2)		8 (1.0)	6 (0.9)	
Time from operation to PROMs completion, mean days (sd, range)	208.5 (28.2, 183 to 358)	209.0 (30.0, 183 to 363)	0.729	209.9 (30.3, 183 to 362)	208.7 (27.7, 183 to 343)	0.410

The posterior approach offered significantly better early functional outcome scores to patients.

Jameson J Arthroplasty 2014

Acta Orthopaedica 2016; 87 (x): x–x 1

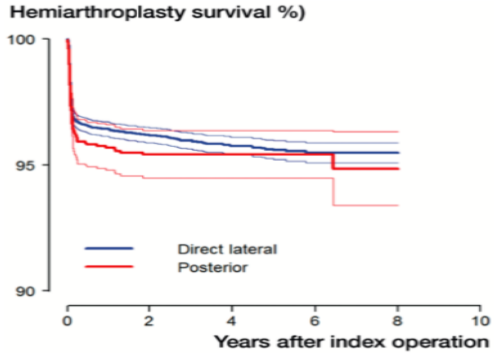
Posterior approach compared to direct lateral approach resulted in better patient-reported outcome after hemiarthroplasty for femoral neck fracture

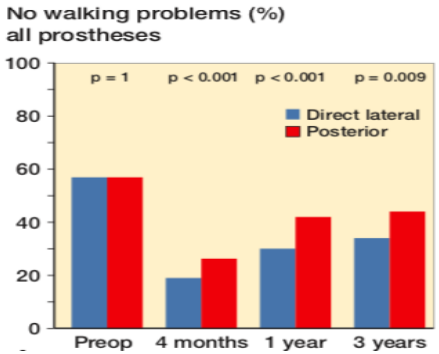
20,908 patients from the Norwegian Hip Fracture Register

Torbjørn B KRISTENSEN [1], Tarjei VINJE [1], Leif I HAVELIN [1,2], Lars B ENGESÆTER [1,2], and Jan-Erik GJERTSEN [1,2]

Nasjonalt Register for Leddproteser

Hemiarthroplasty for hip fracture performed through a posterior rather than a direct lateral approach results in less pain, better patient satisfaction and better quality of life. The risk of reoperation was similar with both approaches.





Scores	Unadj. mean values DLA	PA	Adj. mean values [a] DLA	PA	Direct lateral vs. Posterior Adj. mean difference [a]	95% CI	p-value [a]
4 months							
Pain	22	20	25	23	2.2	0.53 to 3.8	0.01
Satisfaction	25	20	31	28	2.1	0.39 to 3.7	0.02
EQ-5D index score	0.55	0.57	0.45	0.47	−0.014	−0.034 to 0.008	0.2
EQ-VAS	60	61	52	53	−0.29	−2.1 to 1.5	0.8
12 months							
Pain	20	17	21	18	3.1	1.3 to 4.9	0.001
Satisfaction	25	21	27	22	4.7	2.7 to 6.7	< 0.001
EQ-5D index score	0.61	0.64	0.55	0.58	−0.030	−0.055 to −0.006	0.01
EQ-VAS	62	64	59	61	−2.1	−4.2 to −0.0	0.05
36 months							
Pain	20	16	20	17	3.1	0.41 to 5.9	0.02
Satisfaction	26	22	27	24	3.7	0.57 to 6.8	0.02
EQ-5D index score	0.61	0.66	0.56	0.60	−0.033	−0.070 to 0.004	0.08
EQ-VAS	61	65	60	63	−2.4	−5.6 to 0.80	0.1

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Kristensen Acta Orthop 2017

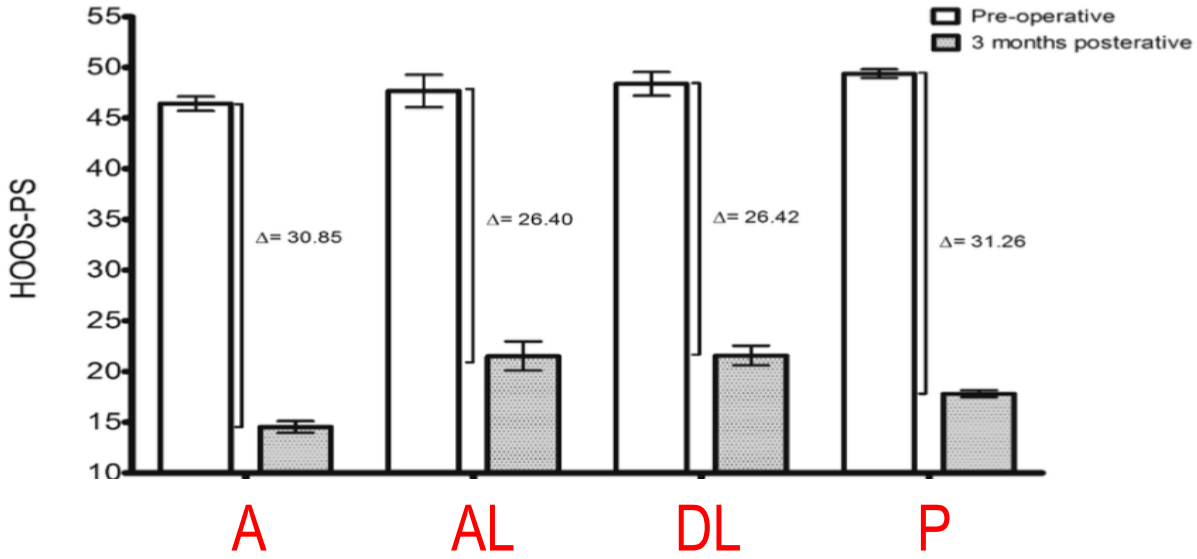
Primary Arthroplasty

Similar Superior Patient-Reported Outcome Measures for Anterior and Posterolateral Approaches After Total Hip Arthroplasty

Postoperative Patient-Reported Outcome Measure Improvement After 3 months in 12,774 Primary Total Hip Arthroplasties Using the Anterior, Anterolateral, Straight Lateral, or Posterolateral Approach

Rinne M. Peters, MD [a, b, *], Loes W.A.H. van Beers, MSc [c], Liza N. van Steenbergen, MSc [d], Julius Wolkenfelt, MD [c], Harmen B. Ettema, MD, PhD [e], Bas L.E.F. ten Have, MD [f], Paul C. Rijk, MD, PhD [a], Martin Stevens, PhD [b], Sjoerd K. Bulstra, MD, PhD [b], Rudolf W. Poolman [c], Wierd P. Zijlstra [a]

DAA and PL showed more improvement in self-reported physical functioning (HOOS-PS) compared with AL and DAL in primary THA.
However, clinical differences were only small.



LROI

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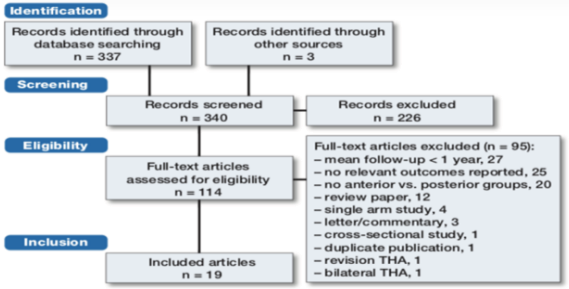
Pters J Arthroplasty 2018

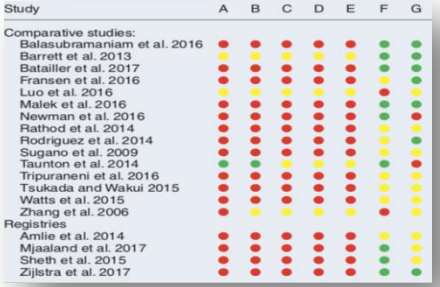
Complicanze

Influence of surgical approach on complication risk in primary total hip arthroplasty

Systematic review and meta-analysis

Larry E MILLER [1], Joseph S GONDUSKY [2], Atul F KAMATH [3], Friedrich BOETTNER [4], John WRIGHT [5], and Samir BHATTACHARYYA [5]





Study	Study design [a]	Treatment period	Parallel treatment period	Learning cases included	Mean follow-up, months A	Mean follow-up, months P	Sample size [b] A	Sample size [b] P	Mean age, years A	Mean age, years P	Female, % A	Female, % P	Mean BMI A	Mean BMI P
Comparative studies:														
Balasubramaniam et al. 2016	RN	2006–2011	No	Yes	12	12	50	42	63	57	50	67	31	30
Barrett et al. 2013	RCT	2010–2011	Yes	No	12	12	43	44	61	63	33	57	31	29
Batailler et al. 2017	RN	2013–2015	Yes	Yes	14	14	201	101	72	74	65	65	26	28
Fransen et al. 2016	RN	2012	Yes	Yes	12	12	45	38	64	63	67	63	25	28
Luo et al. 2016	RCT	2014	Yes	No	14	14	52	52	62	64	67	58	23	24
Malek et al. 2016	RN	2010–2014	Yes	No	18	18	265	183	71	70	56	53	29	29
Newman et al. 2016	RN	–	No	NR	24	24	235	120	63	59	54	57	29	34
Rathod et al. 2014	RN	2007–2011	No	No	16	30	286	293	62	61	55	57	26	26
Rodriguez et al. 2014	PN	2010	Yes	No	12	12	60	60	60	59	53	57	27	28
Sugano et al. 2009	RN	2005–2007	No	NR	24	24	33	39	56	57	88	92	23	23
Taunton et al. 2014	RCT	2012	Yes	No	12	12	27	27	62	66	56	52	28	29
Tripuraneni et al. 2016	RN	2012–2015	Yes	Yes	14	13	66	66	60	60	61	61	28	28
Tsukada and Wakui 2015	RN	2000–2009	No	NR	64	110	139	177	67	62	90	83	23	24
Watts et al. 2015	RN	2010–2014	NR	NR	12	12	716	3,040	64	62	51	51	29	30
Zhang et al. 2006	RCT	2002–2004	Yes	NR	20	20	60	60	61	63	58	53	–	– [c]
Registries														
Amlie et al. 2014	RN	2008–2010	Yes	No	24	30	421	421	67	66	69	64	–	–
Mjaaland et al. 2017	RN	2008–2013	Yes	Yes	52	52	2,017	5,961	67	65	67	65	–	–
Sheth et al. 2015	RN	2001–2011	No	Yes	36	36	1,851	31,747	65	66	60	58	28	29
Zijlstra et al. 2017	RN	2007–2015	No	Yes	40	40	14,446	100,823	–	–	68	68	–	–

A = anterior approach; P = posterior approach; NR = not reported
[a] Study design: PN = prospective nonrandomized; RCT = randomized controlled trial; RN = retrospective nonrandomized.
[b] Reported as number of patients or hips.
[c] All patients with BMI ≤ 27 kg/m².

Outcome	Comparative studies: Studies	Comparative studies: Rate ratio (95% CI) [a]	Registries: Studies	Registries: Rate ratio (95% CI) [a]	p-value [b]
Infection	6	0.66 (0.16–2.7)	1	0.55 (0.37–0.80)	0.8
Thromboembolic event	4	0.59 (0.14–2.4)	0	–	–
Heterotopic ossification	3	0.58 (0.30–1.2)	1	0.81 (0.24–2.7)	0.6
Dislocation	8	0.55 (0.17–1.8)	3	0.74 (0.39–1.4)	0.7
Reoperation	12	1.03 (0.60–1.8)	4	0.83 (0.72–0.95)	0.5
Wound	5	0.93 (0.54–1.6)	0	–	–
Fracture	9	1.7 (0.79–3.7)	1	0.93 (0.66–1.3)	0.2
Patient-reported nerve injury	1	5.0 (0.24–104)	1	2.2 (1.2–4.3)	0.6

[a] Rate ratio > 1 indicates higher complication incidence rate with anterior approach; RR < 1 indicates lower complication incidence rate with anterior approach.
[b] Comparison of rate ratio in comparative studies versus registries, derived from Knapp–Hartung random effects meta-regression model.

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Miller Acta Orthop 2018

Risk Factors for Intraoperative Periprosthetic Femoral Fractures During Primary Total Hip Arthroplasty. An Analysis From the National Joint Registry for England and Wales and the Isle of Man

Jonathan N. Lamb, BSc, MB BS [a, b, *], Gulraj S. Matharu, MPhil, MRes, MB ChB [c, d], Anthony Redmond, PhD, MSc, FFPM [a, e], Andrew Judge, MSc, PhD [c, d], Robert M. West, MSc, DPhil [f], Hemant G. Pandit, DPhil, FRCS (Tr & Orth) [a, b, d, e]

Table 4
Results From Multivariable Regression Demonstrating Risk Factors for IOPFF Subtypes.

	Relative Risk (95% Confidence Interval)		
	Calcar Cracks	Shaft Fractures	Trochanteric Fractures
Approach			
Posterior	1	1	1
Anterolateral	0.94 (0.87-1.02)	1.54 (1.23-1.93)[a]	1.36 (1.22-1.51)[a]
Trochanteric osteotomy	1.03 (0.51-2.05)	2.03 (0.51-8.16)	0.77 (0.29-2.05)
Other	0.83 (0.69-1.00)	2.06 (1.36-3.12)[a]	1.51 (1.21-1.89)[a]

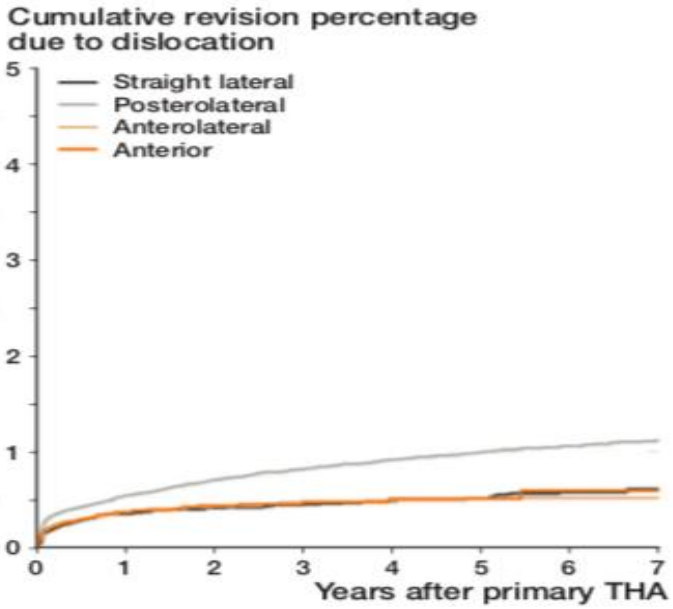
Lamb J Arthroplasty 2019

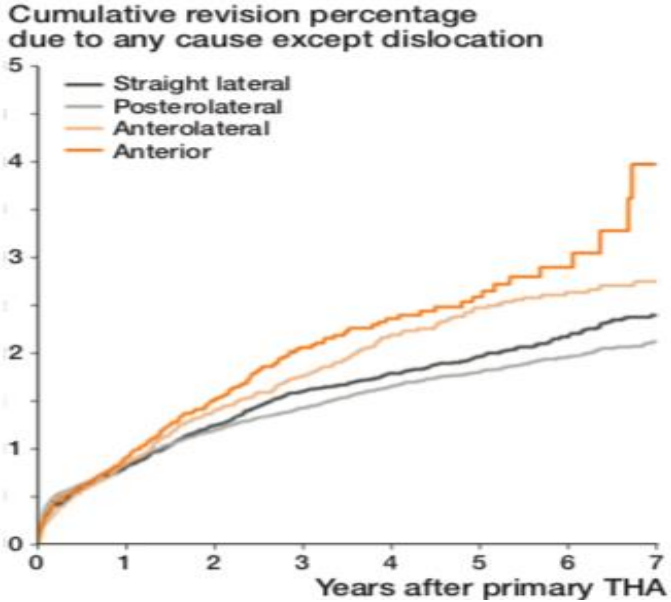
Effect of femoral head size and surgical approach on risk of revision for dislocation after total hip arthroplasty

An analysis of 166,231 procedures in the Dutch Arthroplasty Register (LROI)

Wierd P ZIJLSTRA [1], Bas DE HARTOG [1], Liza N VAN STEENBERGEN [2], B Willem SCHEURS [3], and Rob G H H NELISSEN [4]

LROI





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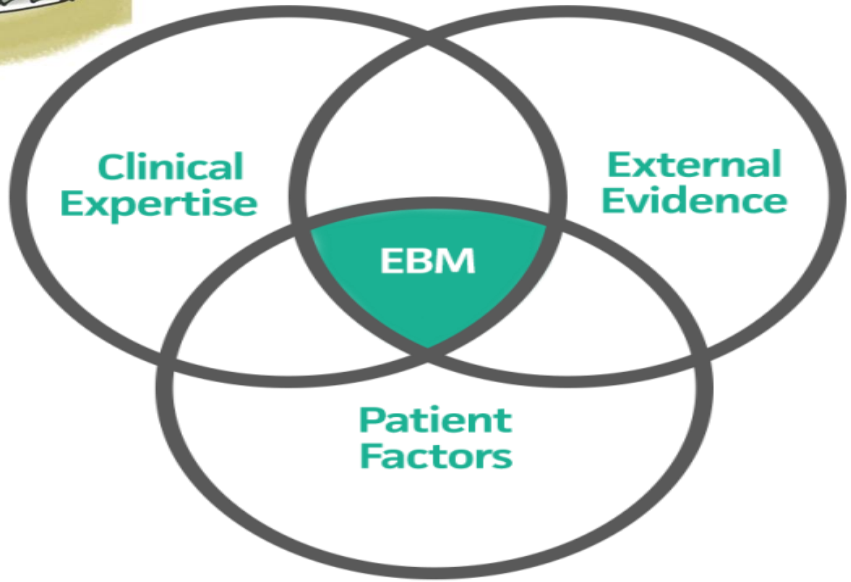
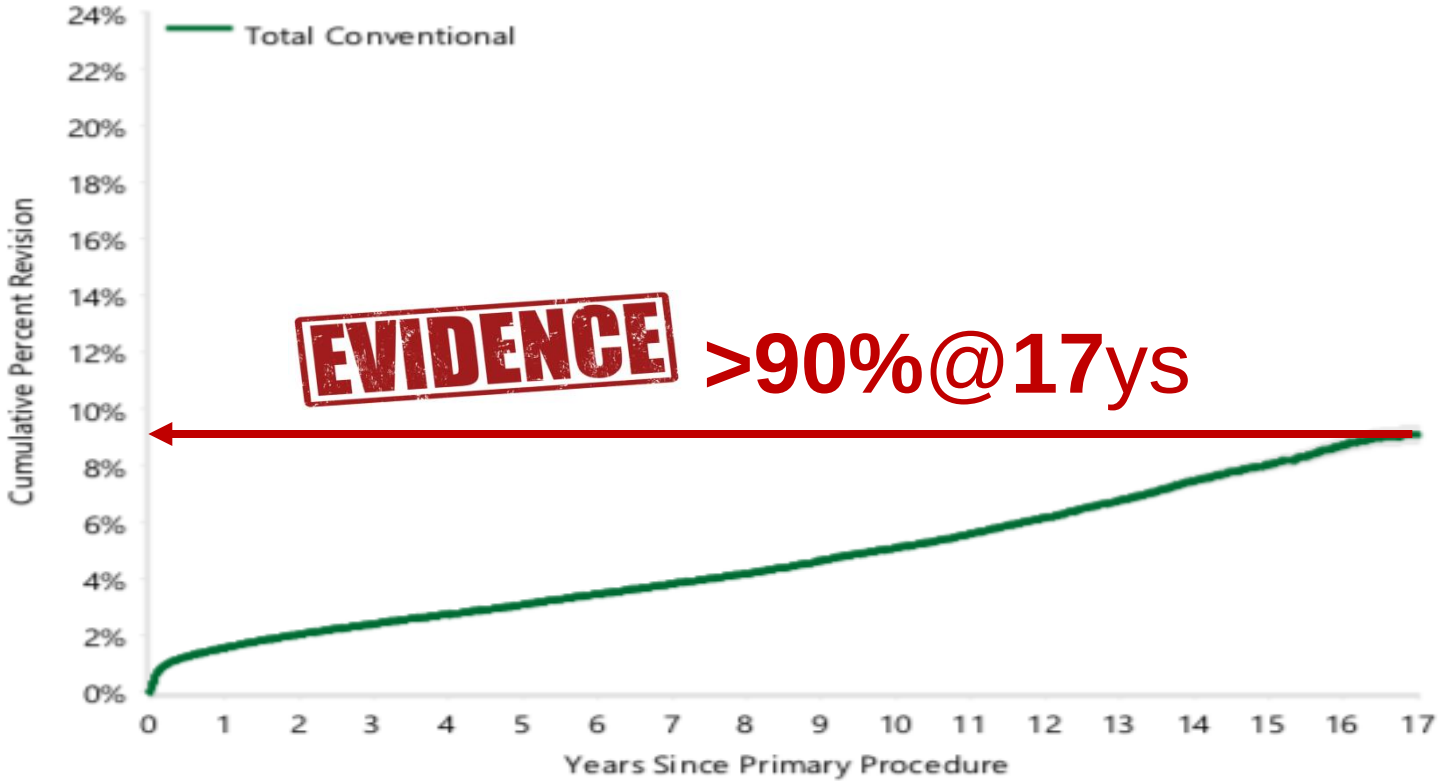
Zulstra Acta Orthop 2018

Riflessioni


Clinical Expertise
External Evidence
EBM
Patient Factors

Cumulative Percent Revision of Primary Total Conventional Hip Replacement (Primary Diagnosis OA)



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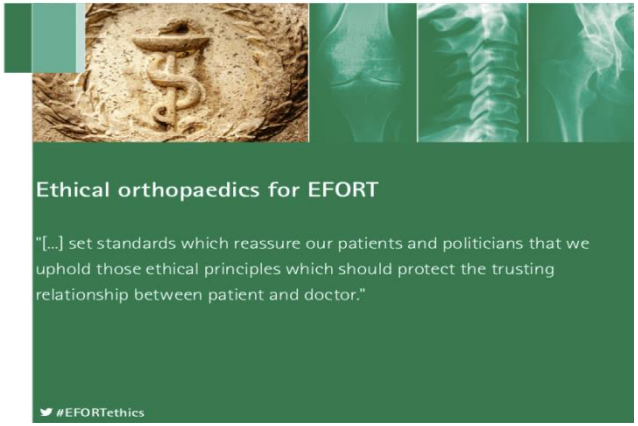

We should offer **effective treatment** based on the **best available evidence**

There should be an end to the haphazard way new surgical techniques and products are introduced.
Patients may be attracted by the latest trend before it has been properly tried and evaluated.
The history of Orthopaedics is littered with widely different procedures which have proved of little value.

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Acta Orthopaedica 2013; 84 (1): 25–31 25

Hip prosthesis introduction and early revision risk

A nationwide population-based study covering 39,125 operations

Mikko Peltola[1], Antti Malmivaara[1], and Mika Paavola[1,2]

Ordinal number group Operation	No. of operations	No. of revisions	Unadjusted HR (95% CI)	Age- and sex-adjusted HR (95% CI)
Minimum of stem and cup order numbers				
1–15	5,967	228	1.3 (1.1–1.6)	1.3 (1.1–1.5)
16–30	3,980	123	1.1 (0.9–1.3)	1.1 (0.9–1.3)
31–50	4,185	135	1.1 (0.9–1.3)	1.1 (0.9–1.3)
51–100	6,820	220	1.1 (1.0–1.3)	1.1 (1.0–1.3)
101–	18,173	527	1.0	1.0

The **first 15 operations** with a new stem/cup model had an increased risk of early revision.

The risk of early revision at the implementation phase should be considered when a new type of THA is brought into use.

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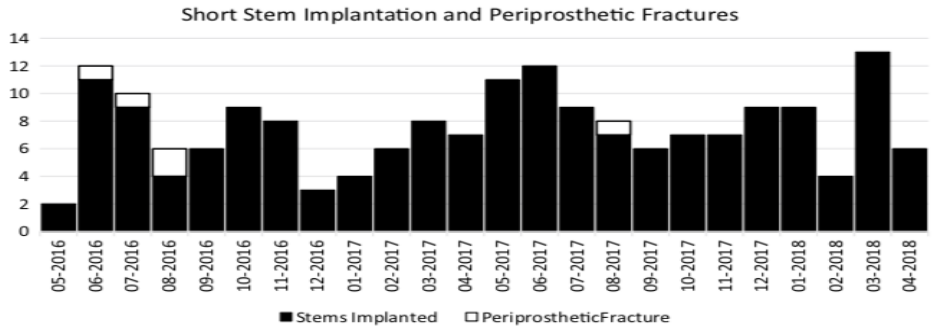
Peltola Acta Orthop 2013



In this study, 80% of periprosthetic fractures following SS THA occurred within the **first 30 cases** for experienced arthroplasty-trained surgeons.

European Journal of Orthopaedic Surgery & Traumatology
https://doi.org/10.1007/s00590-018-2355-z

ORIGINAL ARTICLE - HIP - ARTHROPLASTY

The learning curve following adoption of a novel short-stem prosthesis in total hip arthroplasty: implications on short-term patient outcomes

Jorge A. Padilla[1] · Afshin A. Anoushiravani[2] · James E. Feng[1] · Ran Schwarzkopf[1] · James Slover[1] · Scott Marwin[1]

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Clin Orthop Relat Res (2015) 473:3860–3866
DOI 10.1007/s11999-015-4565-6

Clinical Orthopaedics and Related Research®
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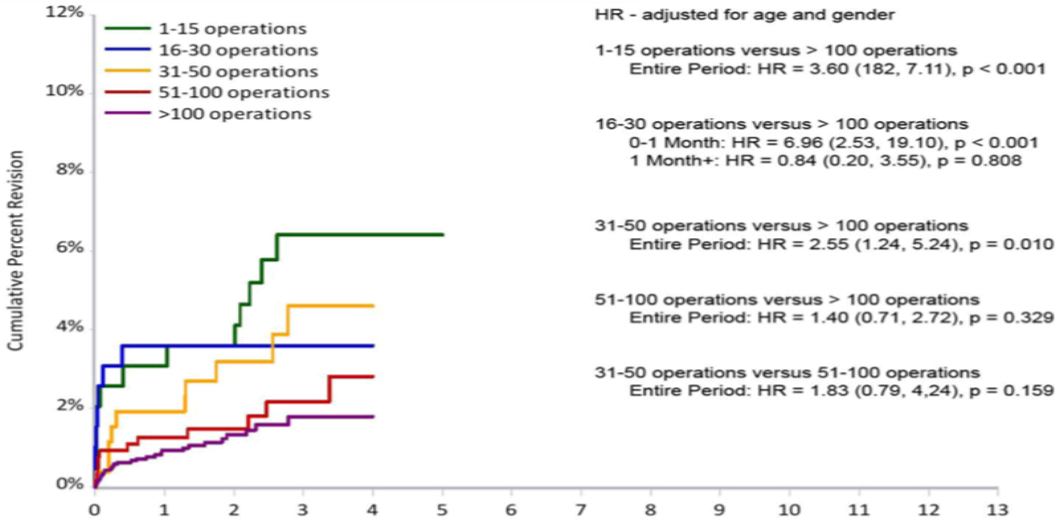
SYMPOSIUM: 2014 INTERNATIONAL HIP SOCIETY PROCEEDINGS

What Is the Learning Curve for the Anterior Approach for Total Hip Arthroplasty?

Richard Noel de Steiger MBBS, FRACS, Michelle Lorimer BSc(Math & Comp Sci) (Hons), Michael Solomon MBChB, FRACS



HR - adjusted for age and gender

1-15 operations versus > 100 operations
Entire Period: HR = 3.60 (182, 7.11), p < 0.001

16-30 operations versus > 100 operations
0-1 Month: HR = 6.96 (2.53, 19.10), p < 0.001
1 Month+: HR = 0.84 (0.20, 3.55), p = 0.808

31-50 operations versus > 100 operations
Entire Period: HR = 2.55 (1.24, 5.24), p = 0.010

51-100 operations versus > 100 operations
Entire Period: HR = 1.40 (0.71, 2.72), p = 0.329

31-50 operations versus 51-100 operations
Entire Period: HR = 1.83 (0.79, 4,24), p = 0.159

For surgeons who have performed >100 procedures, revision rate reduced **from 6% for the first 15 procedures to 2% after first 100**.

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de Steiger CORR 2015

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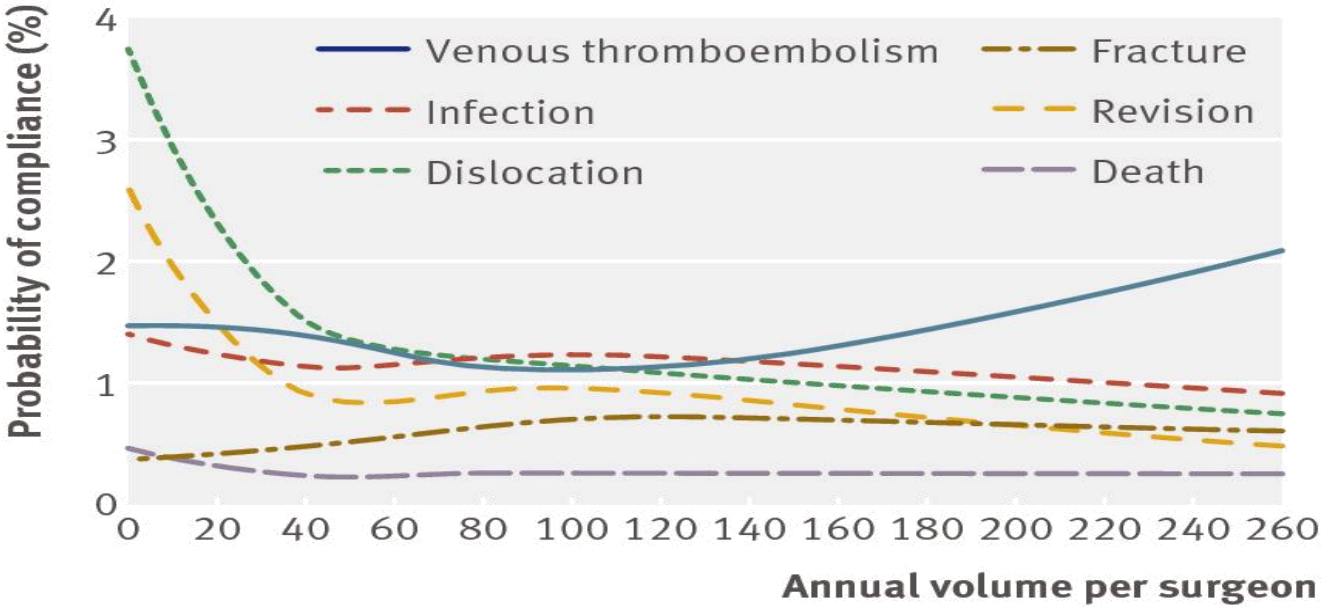
Relation between surgeon volume and risk of complications after total hip arthroplasty: propensity score matched cohort study

BMJ 2014 ; 348 doi: http://dx.doi.org/10.1136/bmj.g3284 (Published 23 May 2014)



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Ravi BMJ 2014

Acta Orthopaedica 2019; 90 (2): 153–158

High annual surgeon volume reduces the risk of adverse events following primary total hip arthroplasty: a registry-based study of 12,100 cases in Western Sweden

Per JOLBÄCK [1,2,3,5], Ola ROLFSON [1,3], Peter CNUDDE [1,3,4], Daniel ODIN [3], Henrik MALCHAU [1,3], Hans LINDAHL [1,2,3], and Maziar MOHADDES [1,3]

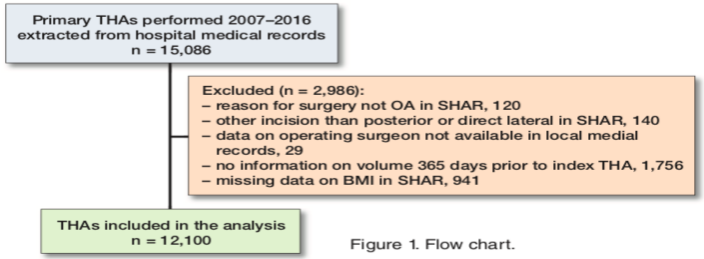


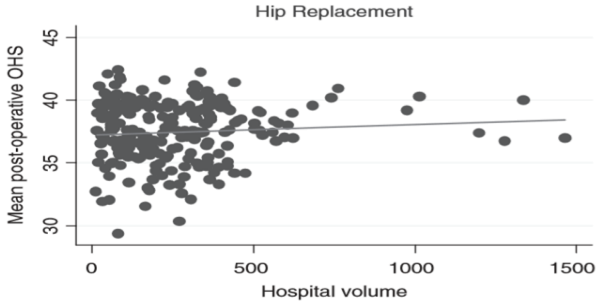
Figure 1. Flow chart.

Table 4. Predicted risk of AE within 90 days for annual surgeon volume of primary THAs

Annual surgeon volume	Mean risk (%)	95% prediction interval (%)
0	8	7–10
10	8	6–9
20	7	5–9
30	6	5–8
40	6	4–7
50	5	4–7

Relationship Between Patient-reported Outcomes of Elective Surgery and Hospital and Consultant Volume

Mira Varagunam, PhD, Andrew Hutchings, MSc, and Nick Black, MD



Consultant volume has an effect in hip replacement

on all 3 outcomes studied.

(A patient operated on by a consultant with an annual volume of 250. may achieve 1.2 points more on the OHS scale compared with patients treated by a consultant with a caseload of 50.)

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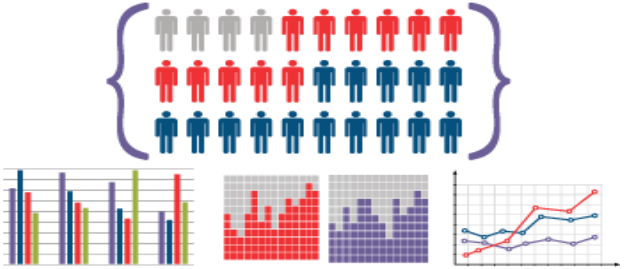
Varagunam Med Care 2015



- Early recovery (A)
- Patient satisfaction (A, P)
- Safety (less complications) ???
- Long term survival ?
- Learning curve (DL, P)
- …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