

Artroplastias primárias da anca

Fernando Judas

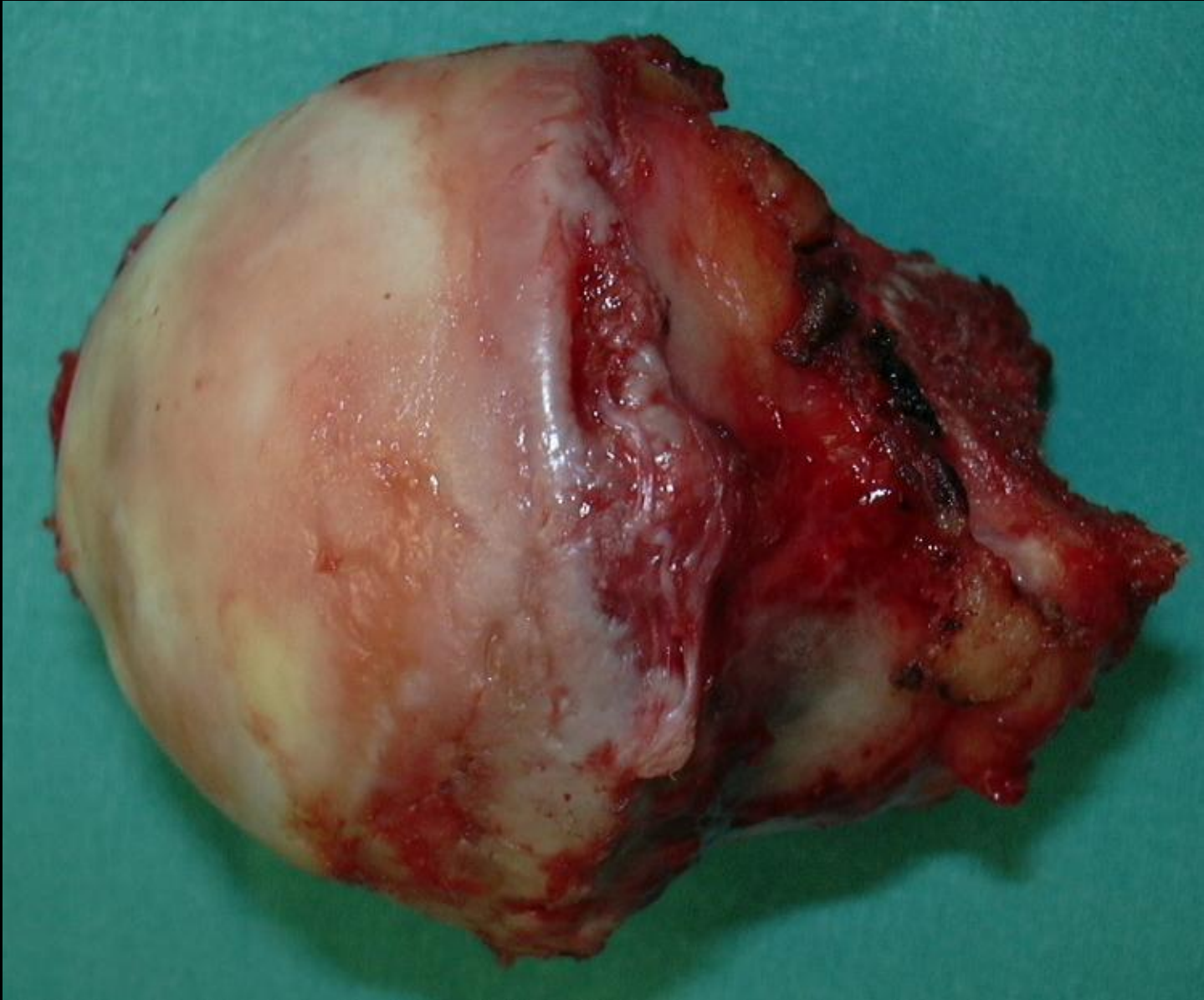
Fórum Sanfil 2008

Coimbra, Novembro, 2008.

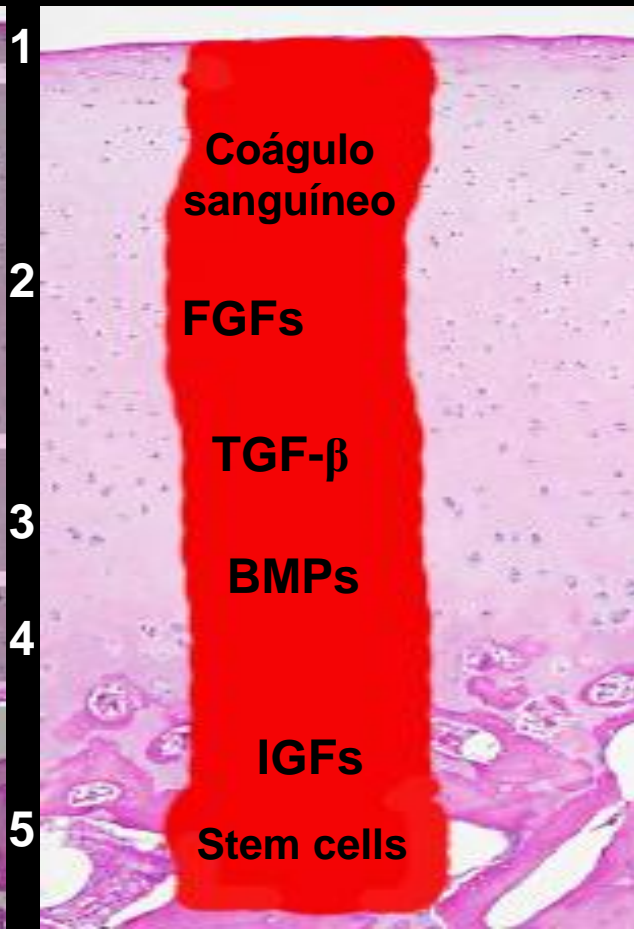
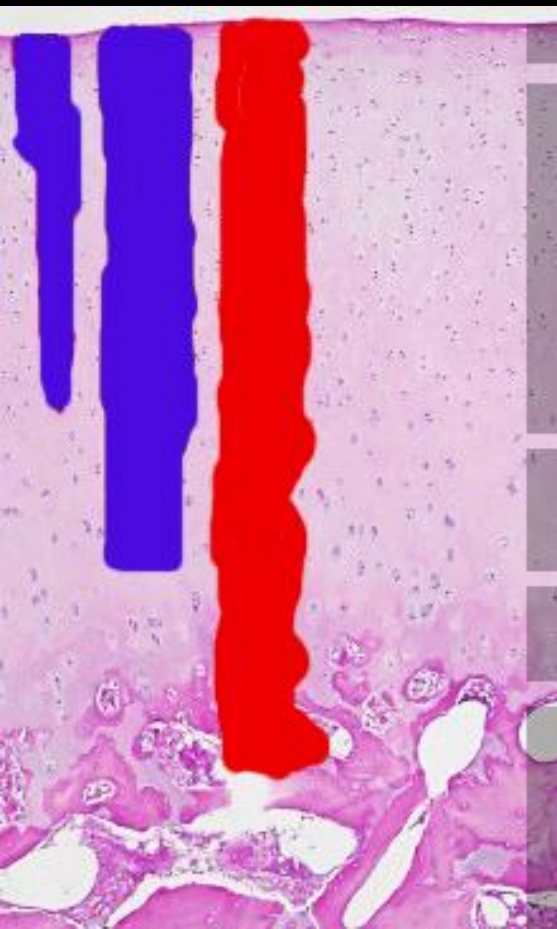
FMUC

Serviço de Ortopedia dos HUC

O problema: o processo degenerativo da cartilagem articular



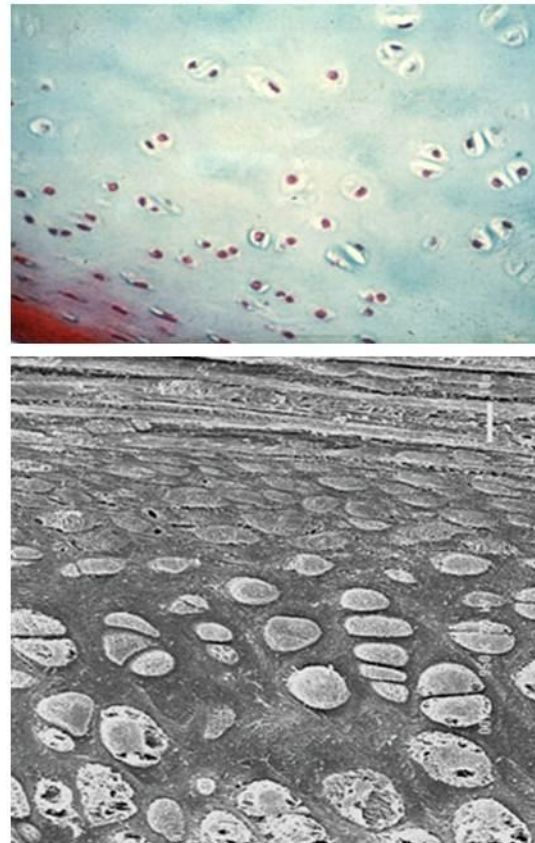
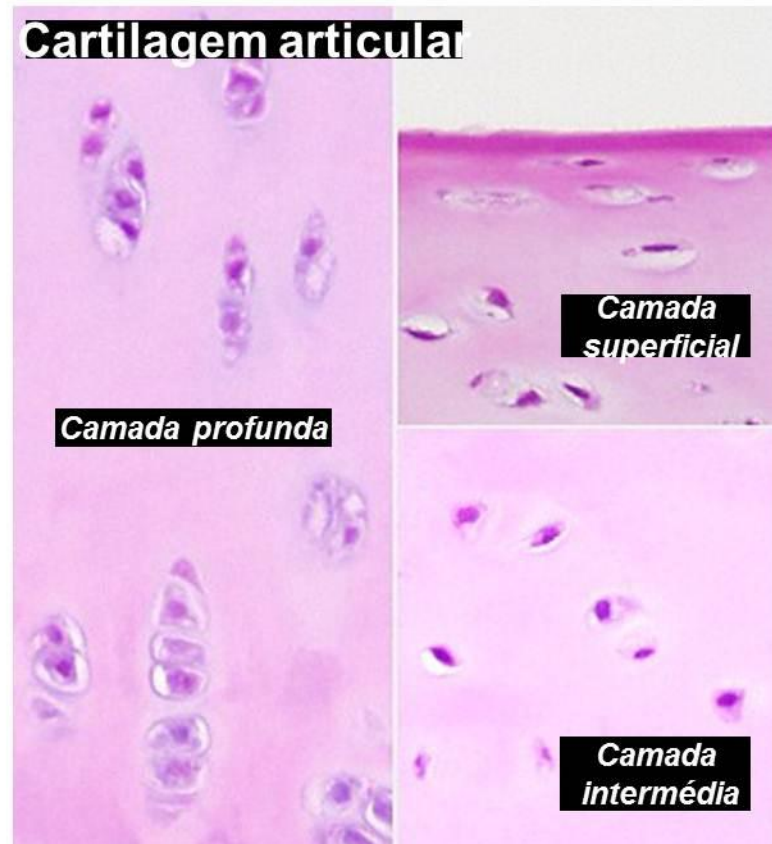
Capacidade de regeneração espontânea do tecido cartilagíneo é limitada



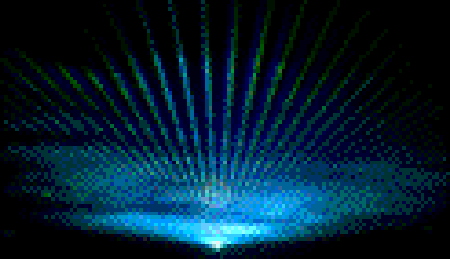
....troublesome thing and once destroyed, it is not repaired.

Hunter, 250 years ago.

***Nenhuma das modalidades terapêuticas usadas
mostrou capacidade para reproduzir, de forma consistente,
uma cartilagem hialina normal***

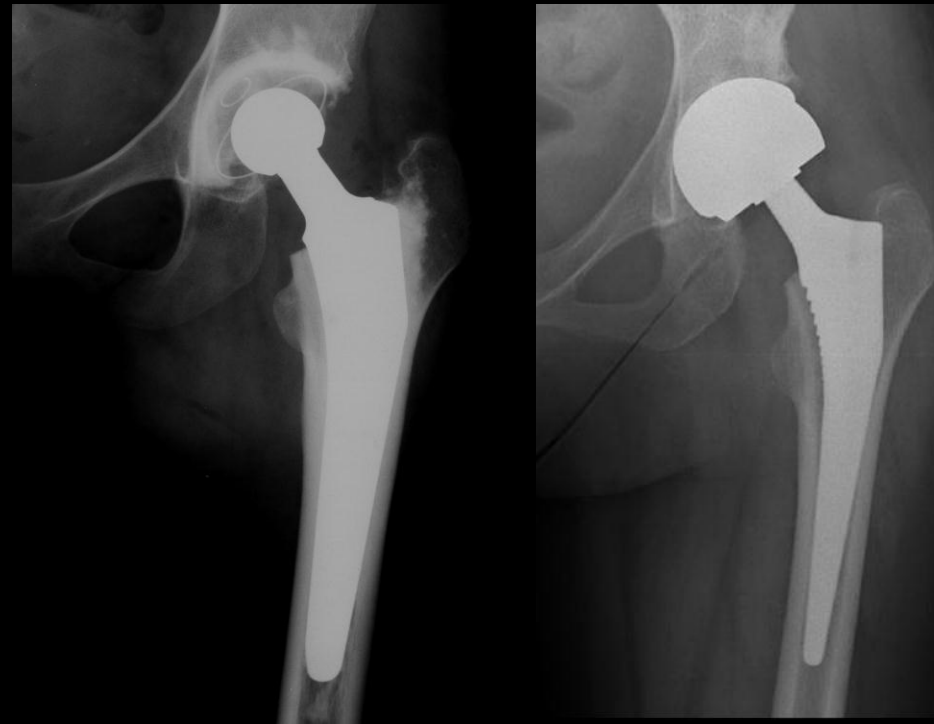


Solução !!!



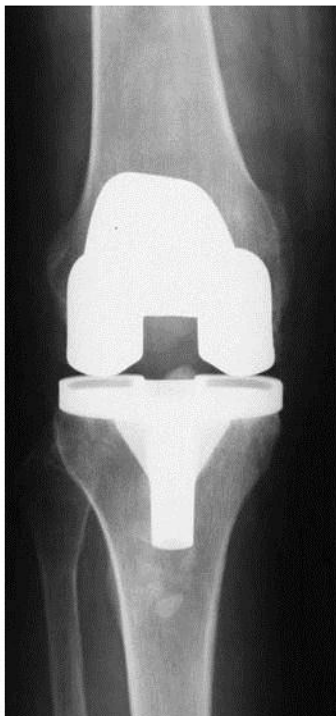
**Medicina
Regenerativa**

PTA a melhor solução actual





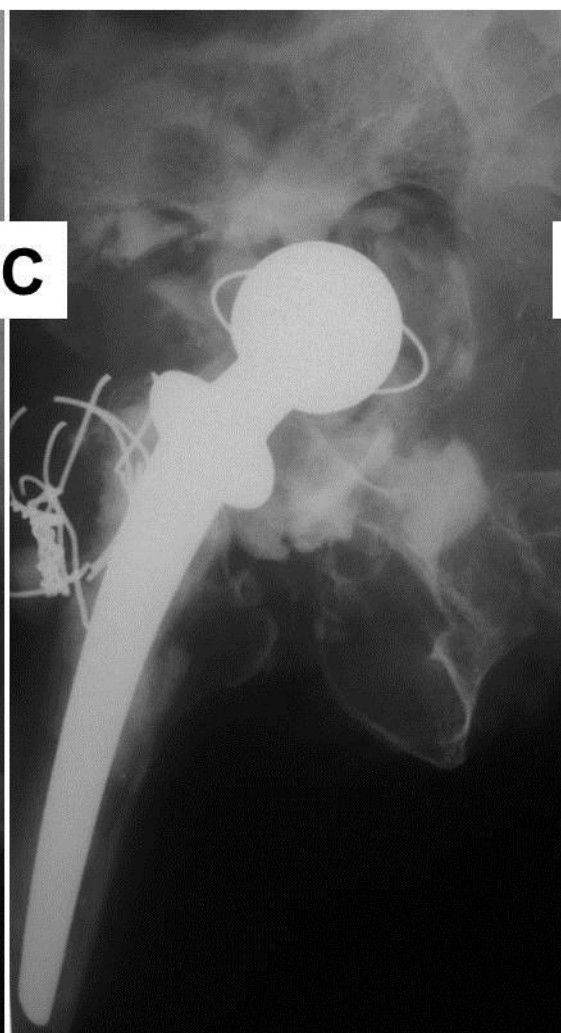
HUC



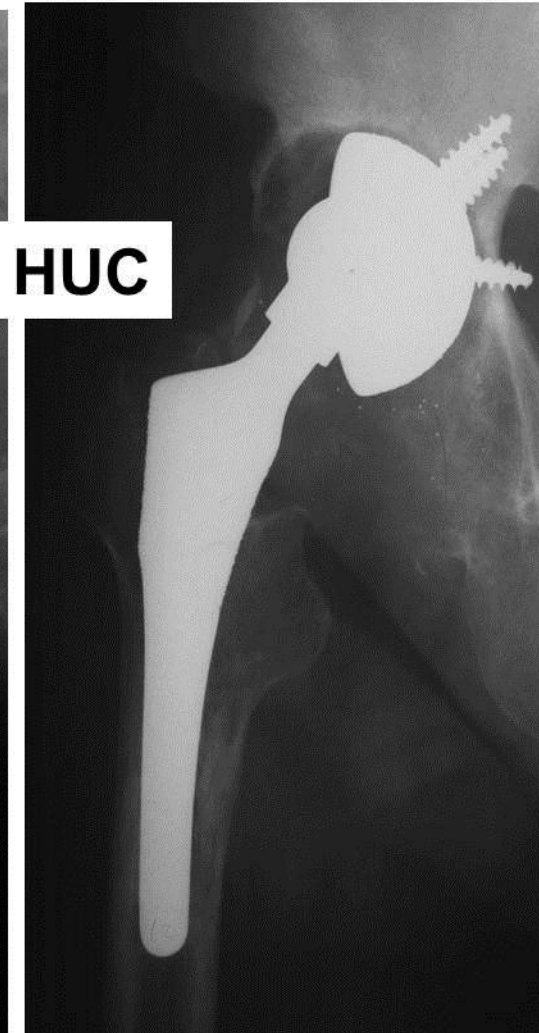
Nenhuma artroplastia da anca resiste à prova do tempo



HUC

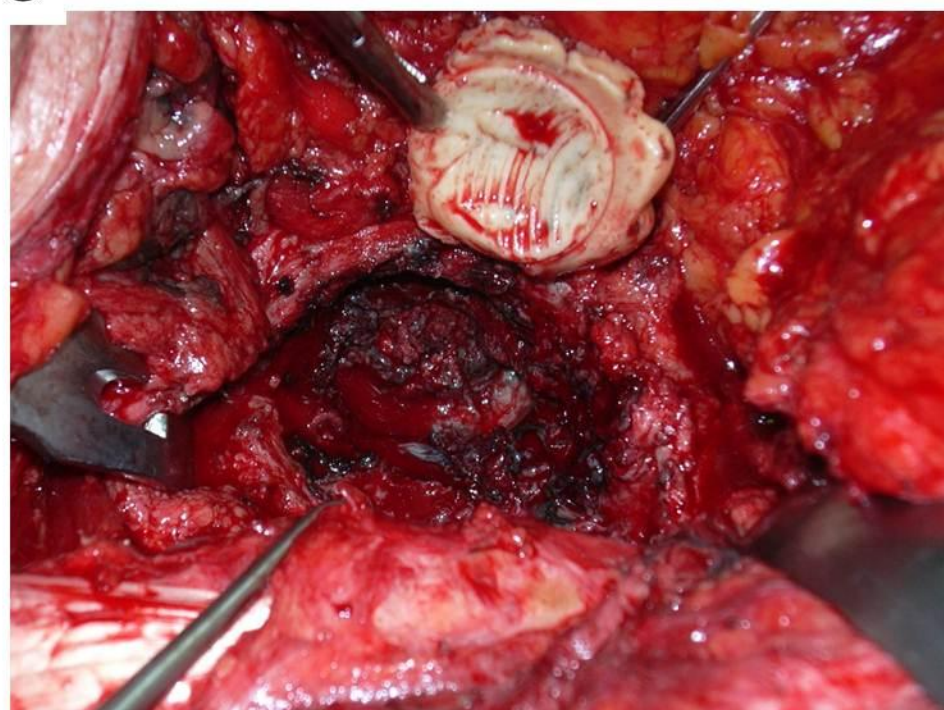
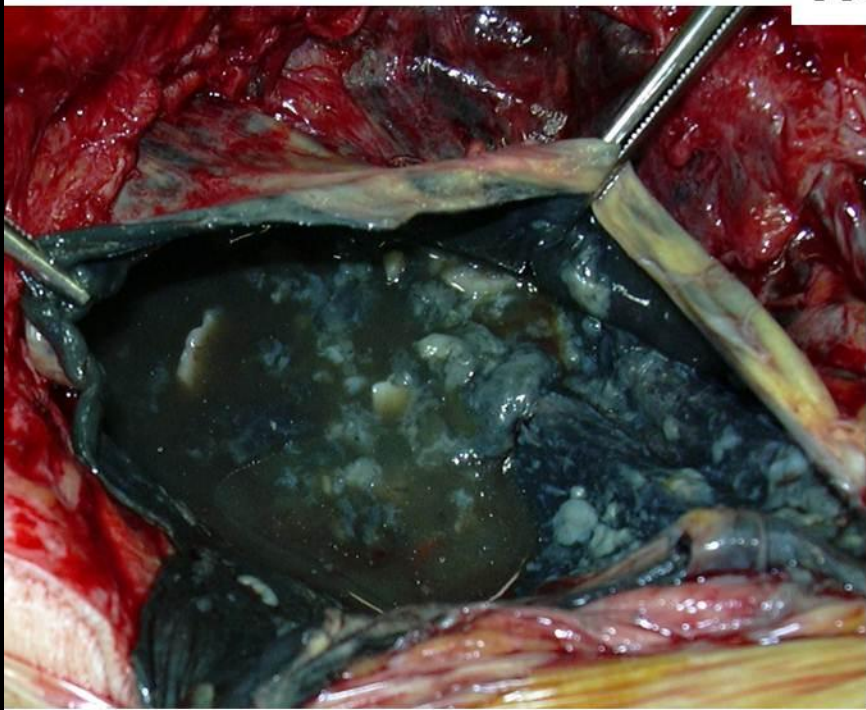


HUC

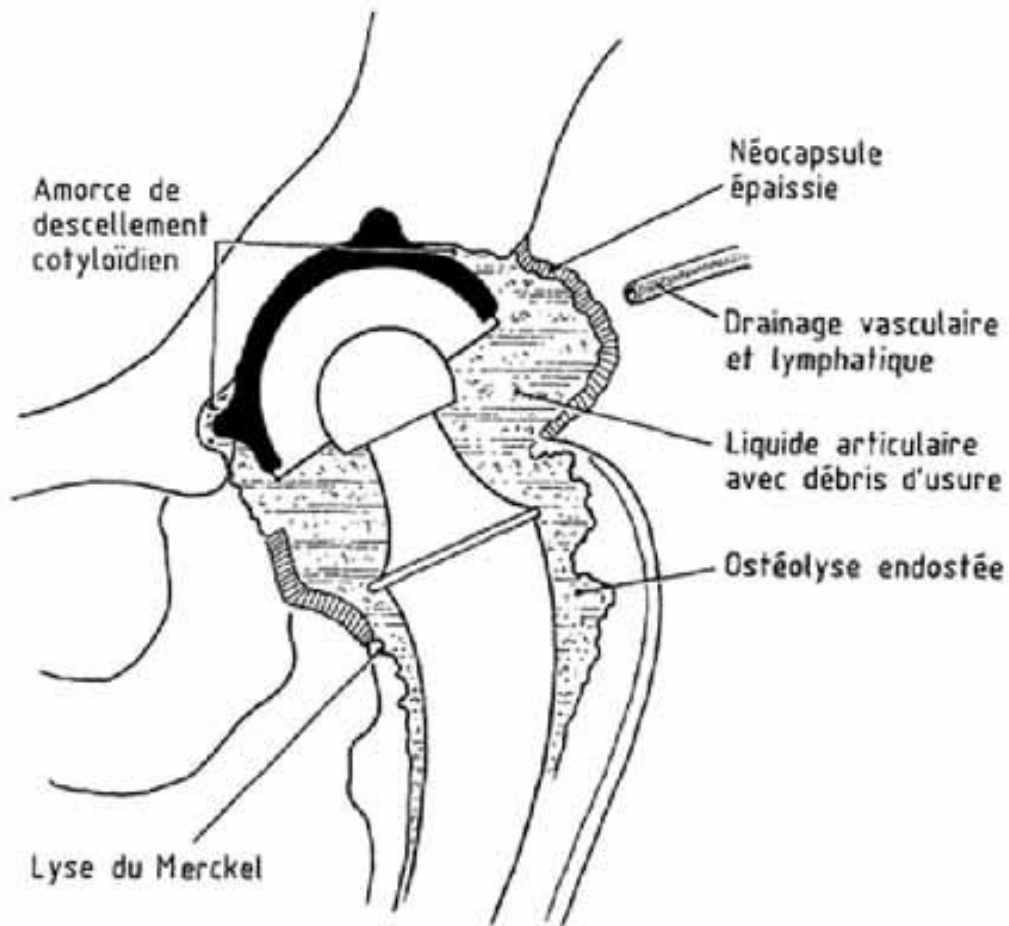




HUC



***Descolamento de próteses da
anca...factores biológicos***

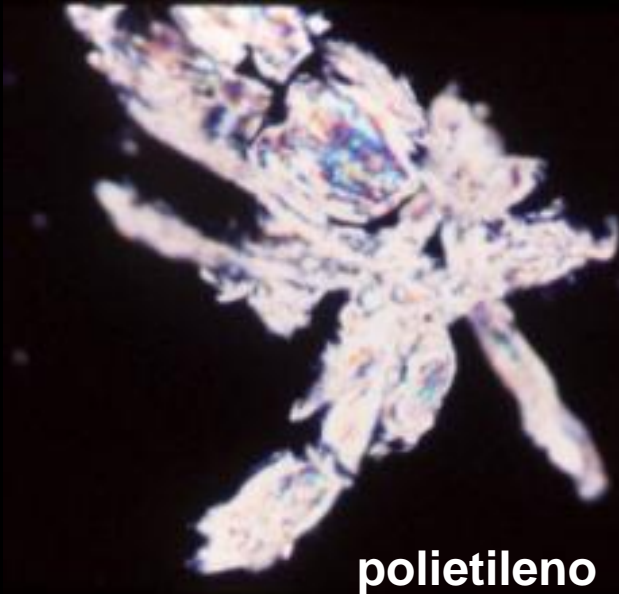
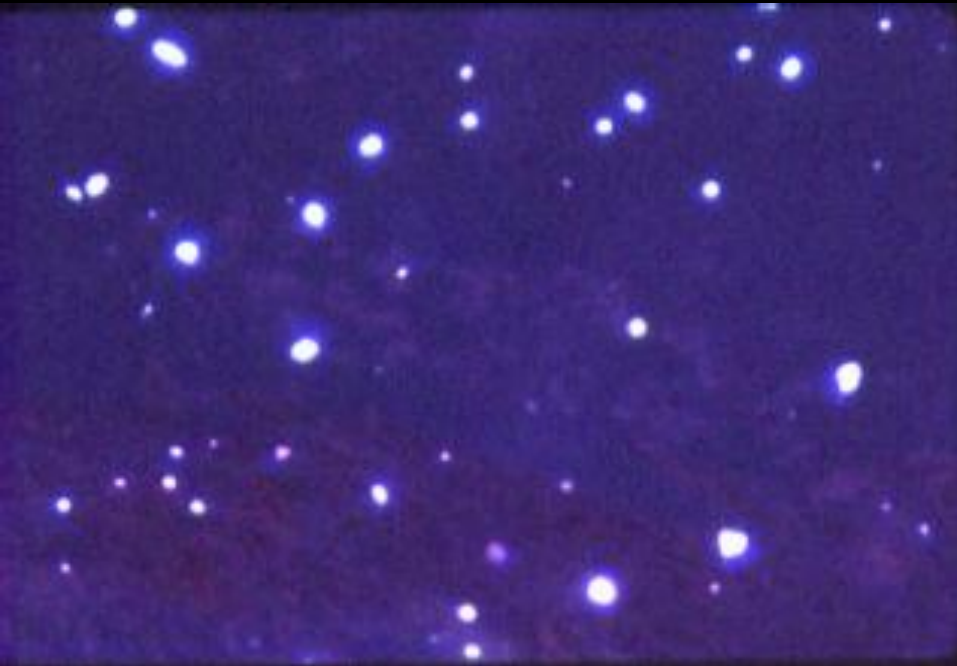
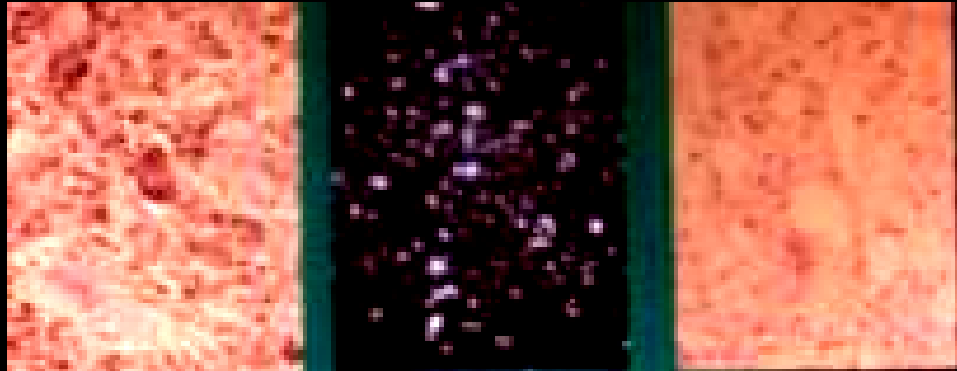


Conception du descellement
prothétique selon Willert 1974

Schmalzried, Jasty and Harris described "the effective joint space"

Partículas de desgaste dos biomateriais

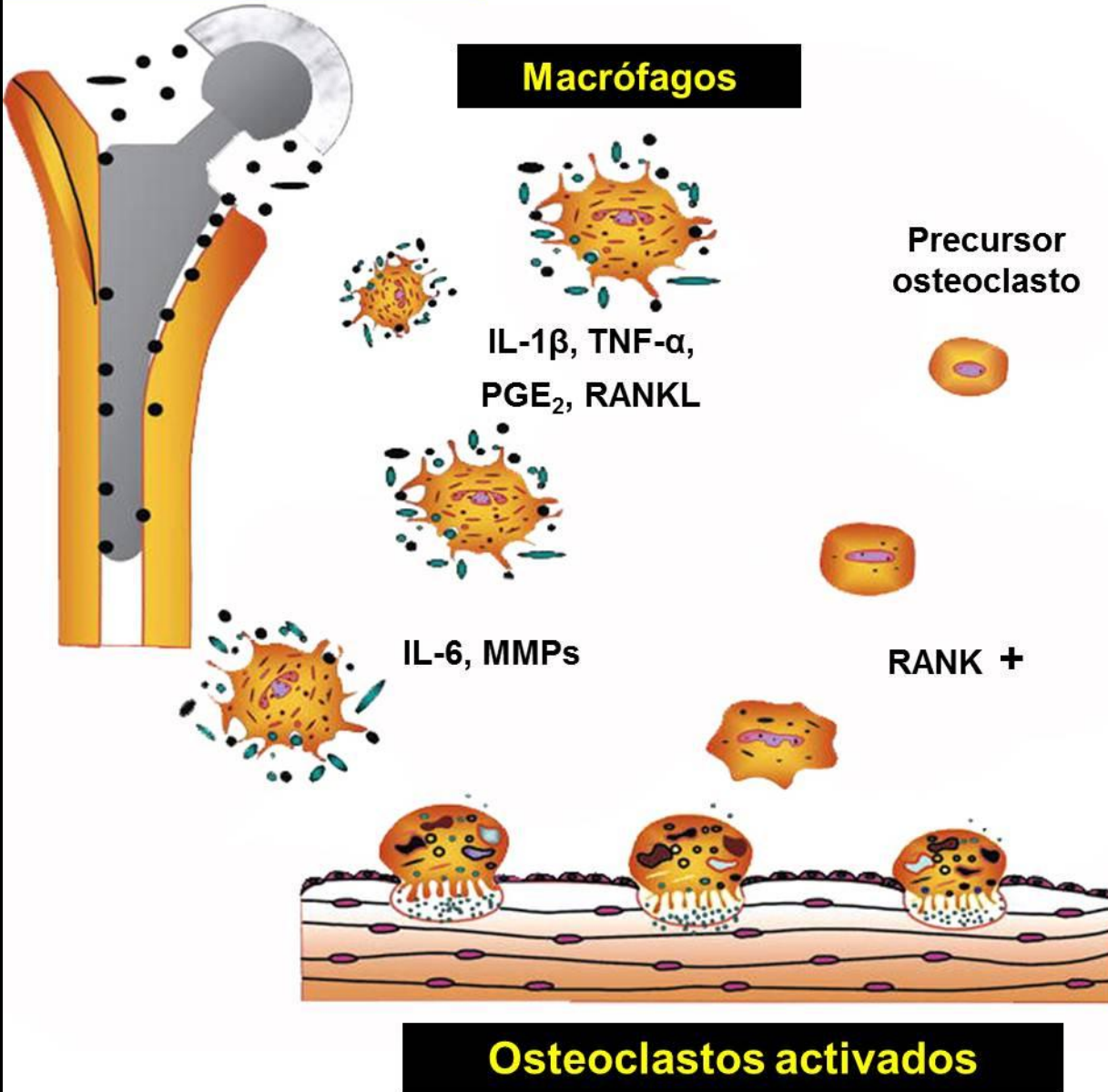
Polietileno, Metálicas, Cimento



polietileno

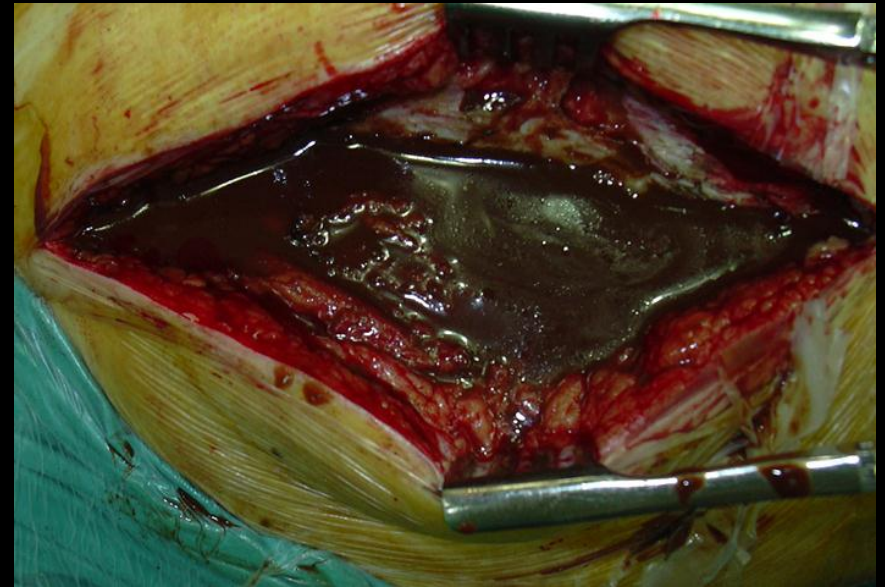
Partículas de desgaste

Desprendimento/descolamento asséptico de PTA



Osteólise

Reabsorção óssea
periprotética



***A pressão do líquido intra-articular
causa morte dos osteócitos...osteólise***

Aspenberg P, Van der Vis H. Migration, particles, and fluid pressure. A discussion of causes of prosthetic loosening. Clin Orthop. 1998;352:75-80.

Van der Vis HM, Aspenberg P, Marti RK, Tigchelaar W, Van Noorden CJ. Fluid pressure causes bone resorption in a rabbit model of prosthetic loosening. Clin Orthop. 1998;350:201-8.

J.N.S.

Coxite esq. Brucelose – PTA

Descolamento da prótese – 4 anos -

Peso 168 Kg

Insuficiência hepática

Plaquetas 25 000



4 anos de evolução falência mecânica

Idade 54 anos

Proposta: excisão artroplástica

Banda gástrica.....Reconstrução artroplástica ??

Descolamento de próteses da anca...factores mecânicos

J.N.S.



Próteses cimentadas

VS

Próteses não cimentadas da anca

PTA 50 anos de evolução

Desenho dos implantes

Biomateriais

Tribologia polietileno altamente reticulado, poli/metal, poli/cerâmica, metal/metal, cerâmica/cerâmica, metal/cerâmica.....compósitos

Técnica cirúrgica, entre outros

PTA cimentada, PTA não cimentada,

PTA híbrida, PTA de revestimento

Qual é a melhor solução?

O SUCESSO CLÍNICO das PTA está dependente de uma miríade de factores.
O método de fixação e as partículas de desgaste representam apenas duas variáveis.

Qualidade óssea e a Morfologia da anca

A "personalidade da doença"

Indicação Clínica

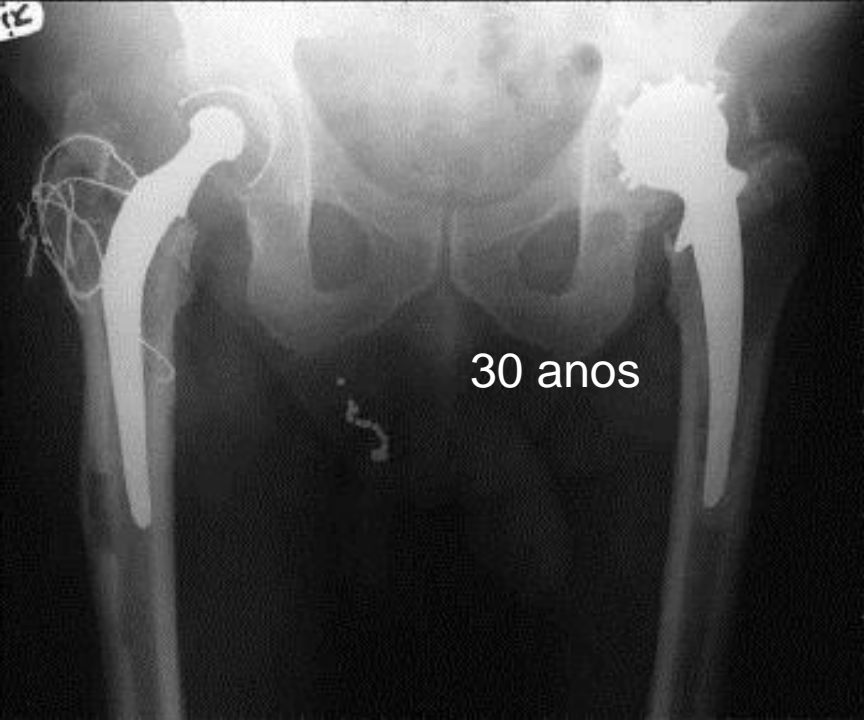
reumatismos inflamatórios, degenerativa, displasia congénita da anca, sequelas traumáticas, Legg-Calvé-Perthes, EFS, artrite sépticas, osteonecroses, protusão acetabular idiopática.....

Definição de falência (revisão, lise radiológica, insuficiente resultado clínico)



Apenas conhecemos a ponta do *iceberg*

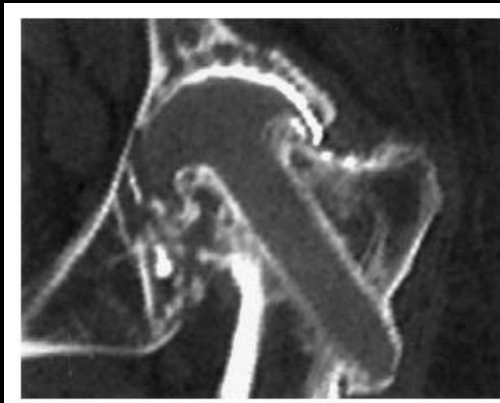
Procurar a simplicidade para preservar a complexidade



Long-Term Clinical, Radiological and Histopathological Follow-Up of a Well-Fixed McKee-Farrar Metal-on-Metal Total Hip Arthroplasty

Michael T. Clarke, MD,* Clare Darrah, RN,† Todd Stewart, PhD,‡
Eileen Ingham, PhD,§ John Fisher, PhD,‡ and John F. Nolan, FRCS (Tr & Orth)†

The Journal of Arthroplasty, Vol. 20 N° 4 2005.

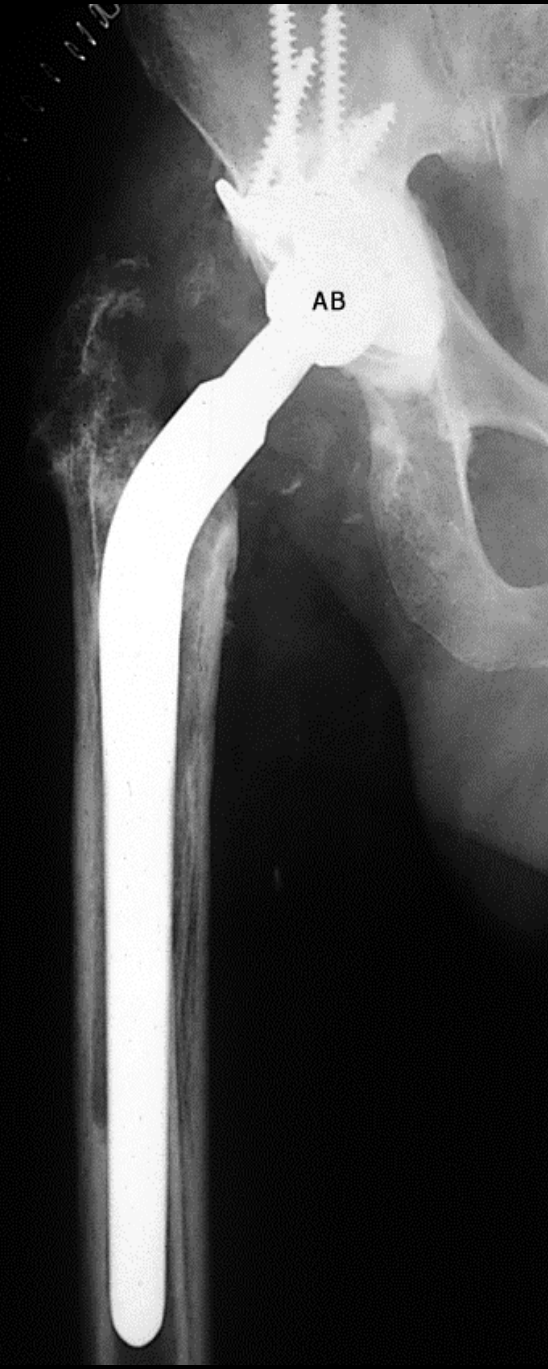
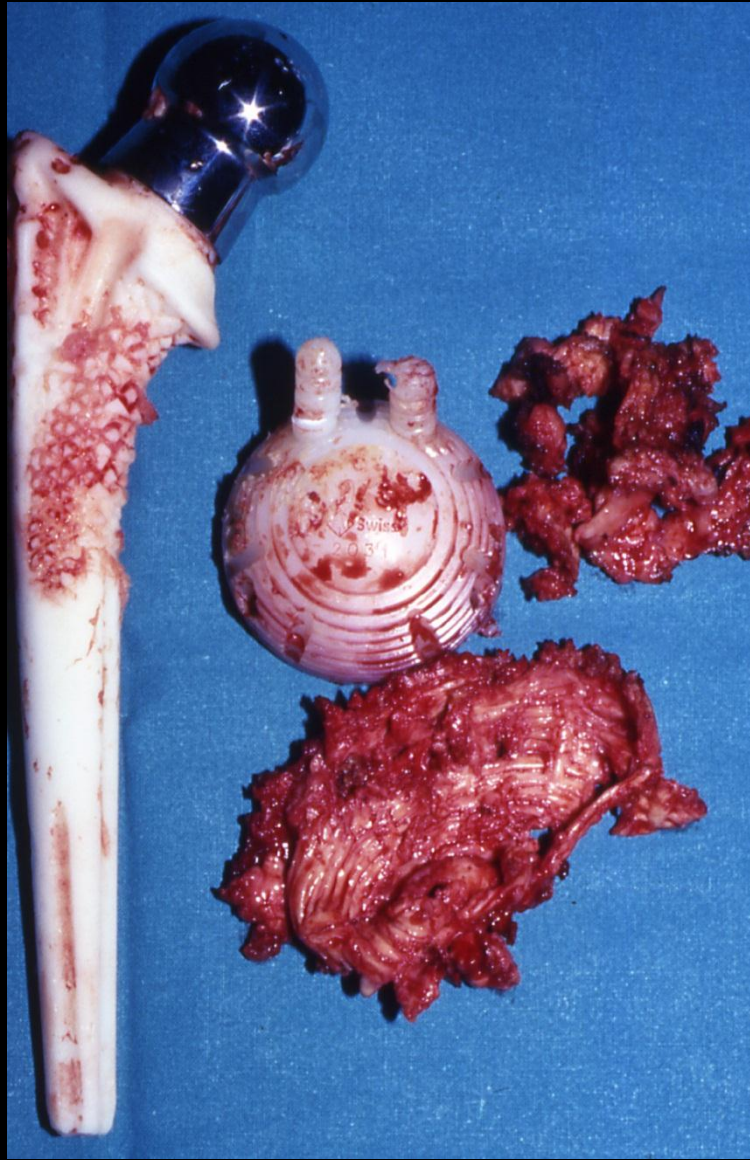
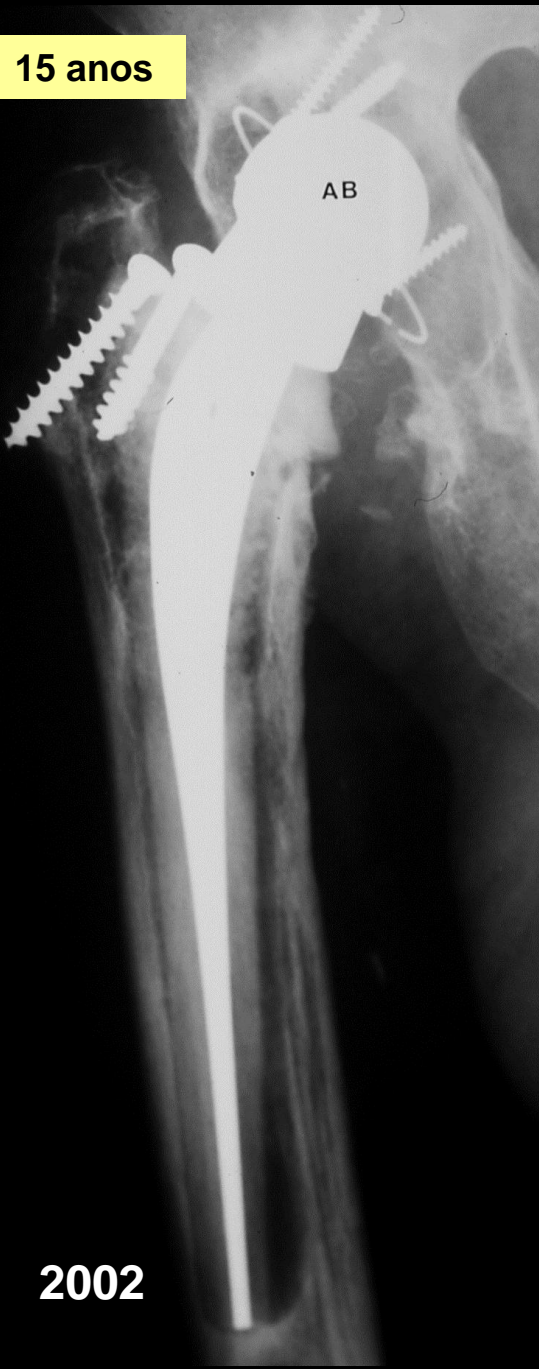


Fifty-One-Year Survival of a Judet Polymethylmethacrylate Hip Prosthesis

Simon Kovač, MD,* Venčeslav Pišot, MD,* Rihard Trebše, MD,* and
Aleksander Rotter, SD†

The Journal of Arthroplasty, Vol. 19 N° 5 2004.

15 anos



2002

19 Y



3 m

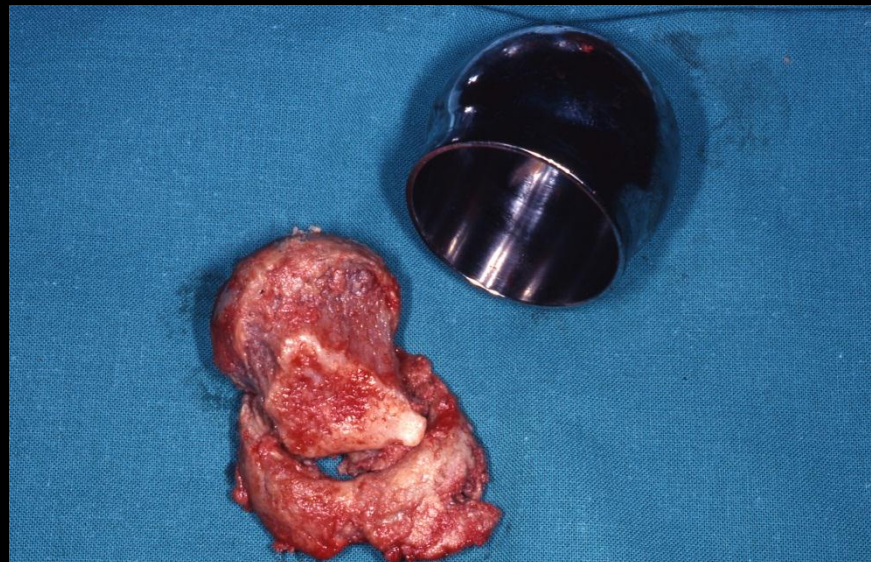
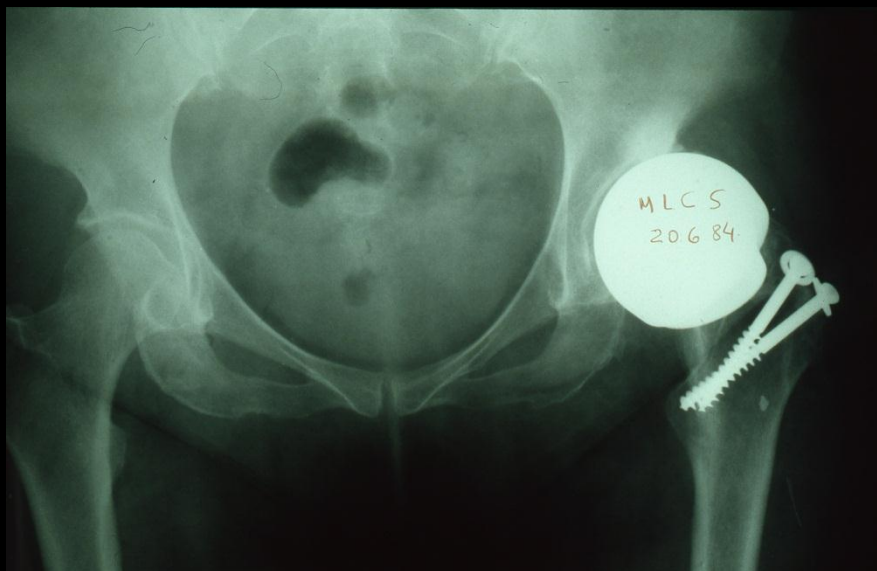


7 m



HUC

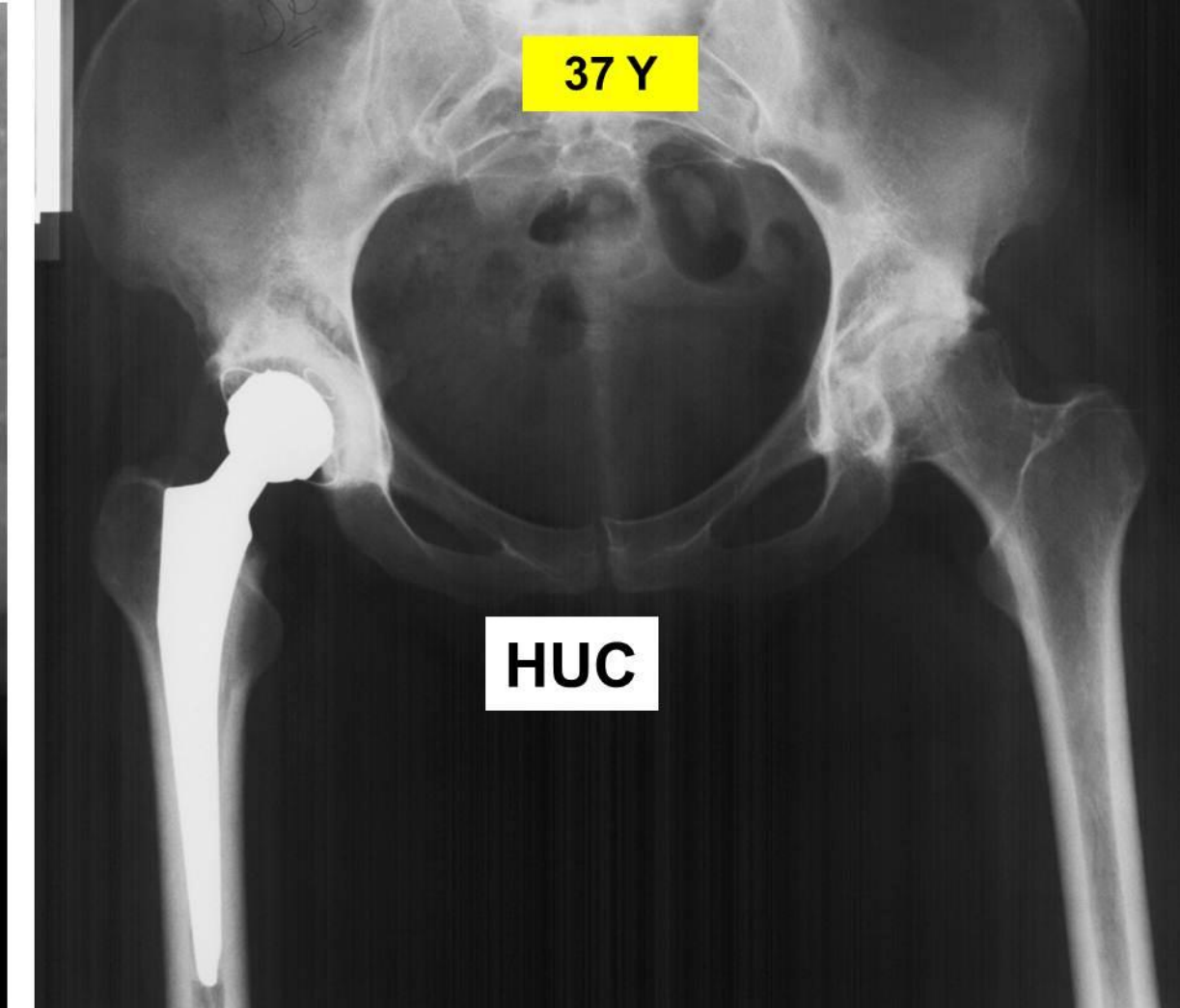
Dupla cúpula de Gerard



Artroplastia total de revestimento



??? PTA cimentada superfície de fricção metal-metal ???



Acetabular failure of metal-on-metal articulation total hip arthroplasties, with cemented-polyethylene cup inserts.

JP Levai et al. In total hip arthroplasty, **Charnley evolution 2004**: 71-72, Lyon.



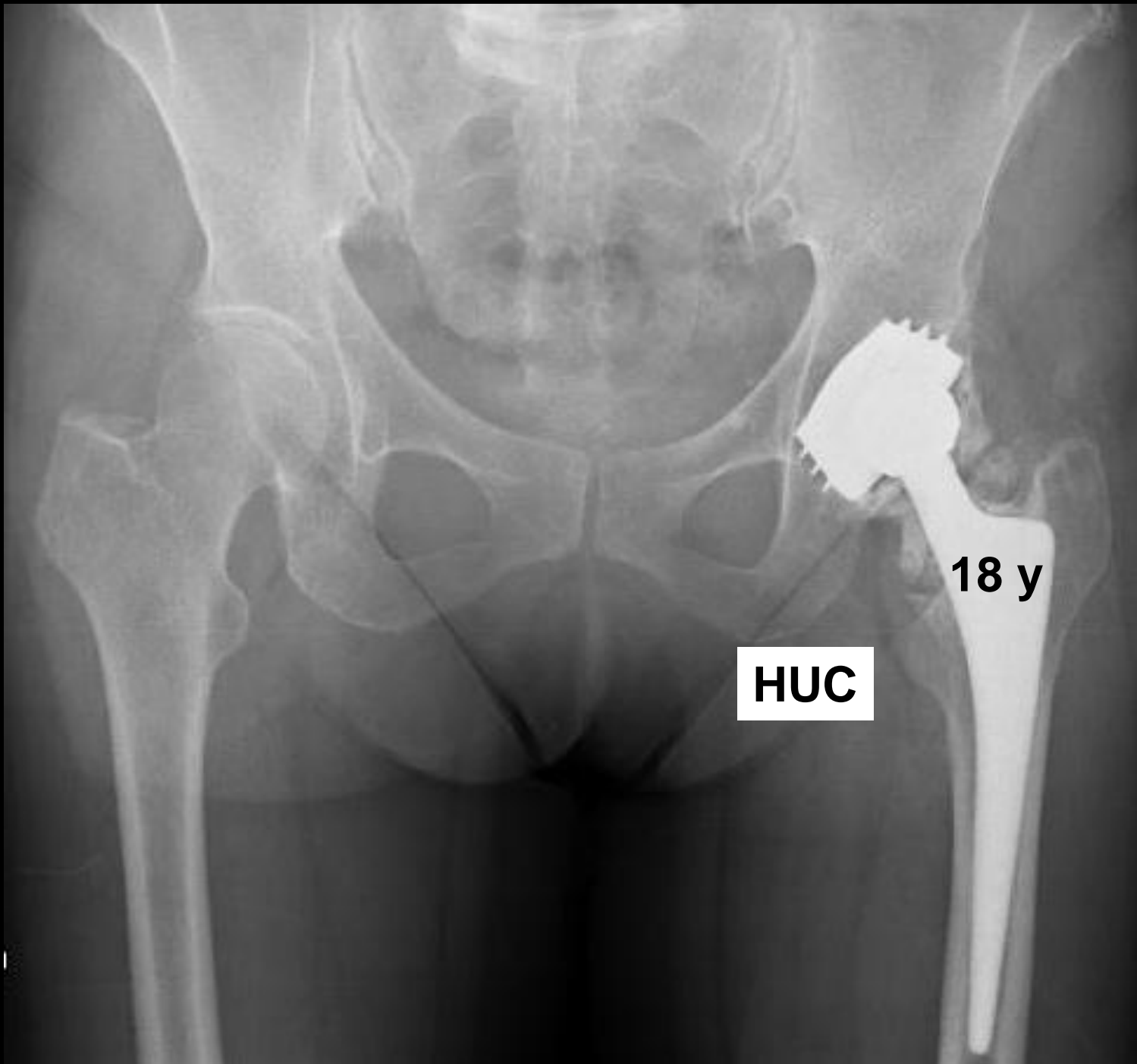
150 THA, follow-up Mx 5 years (3y 8m)

Survival curve 86.9%± 11.1

Evolutionary radiolucent 61%±13,8

2005

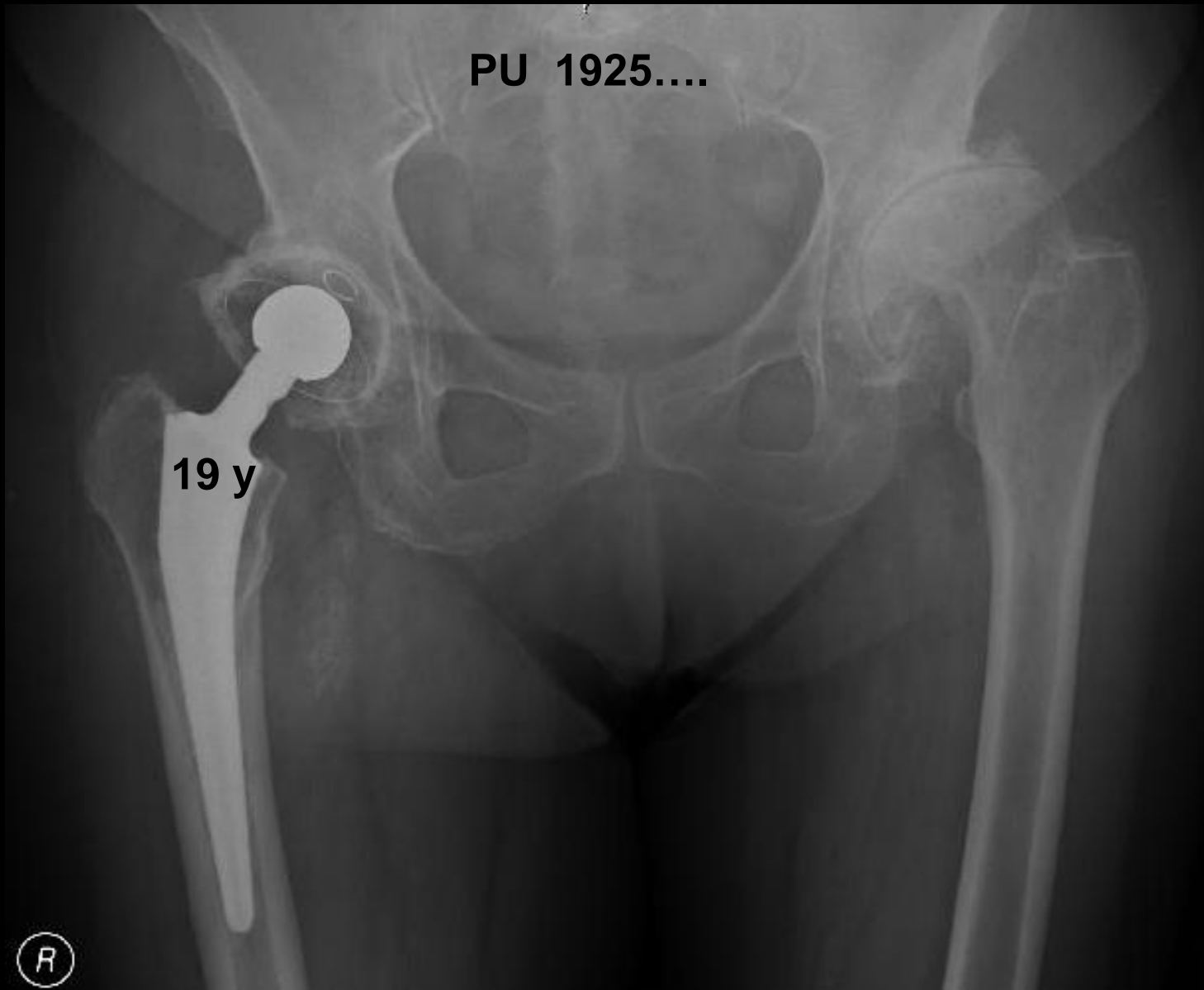
.....the authors have **now abandoned** direct attachment of polyethylene-metal cups with cement in THA, although the metal-on-metal friction articulation has not abandoned.



18 y

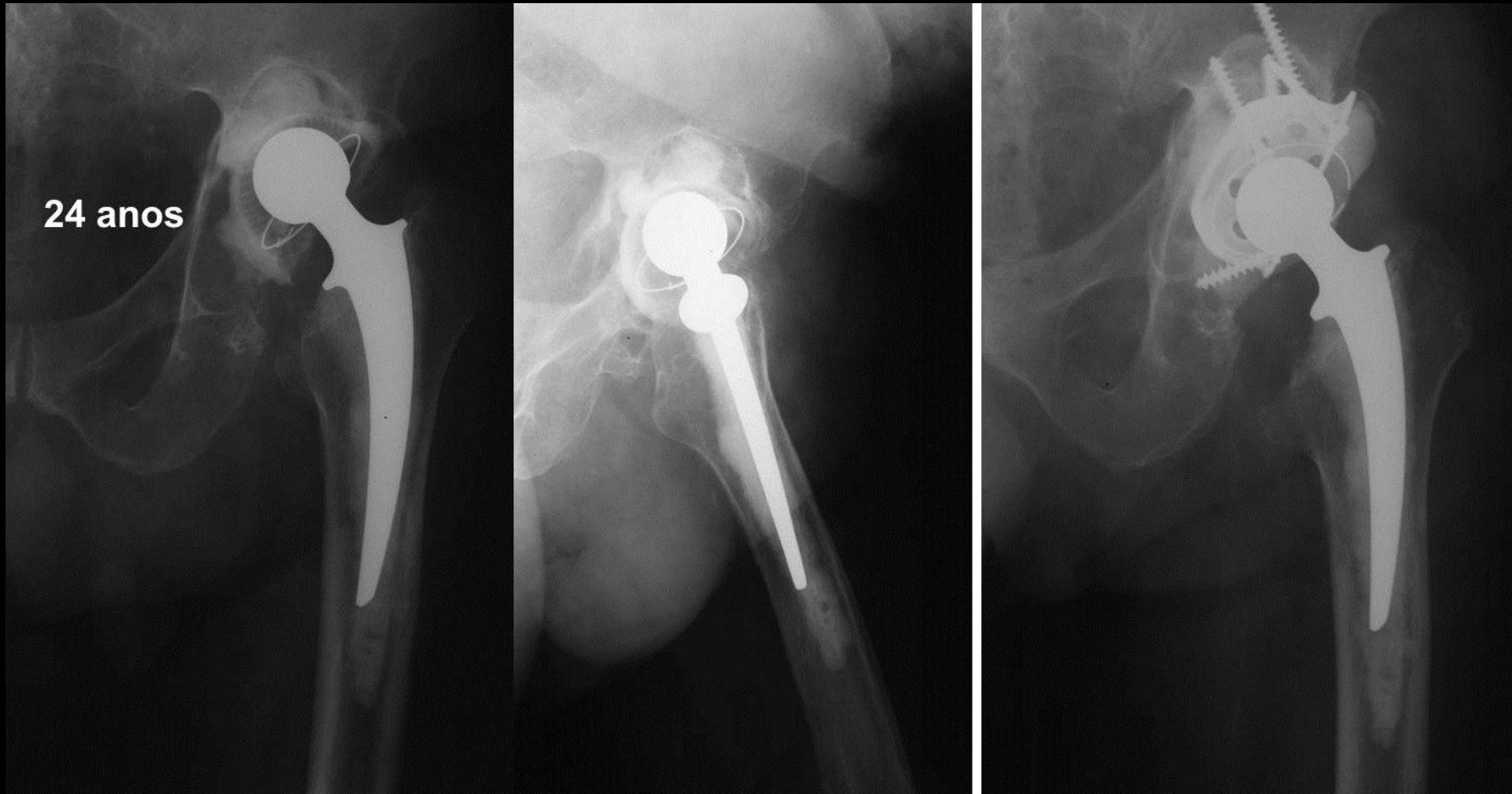
HUC

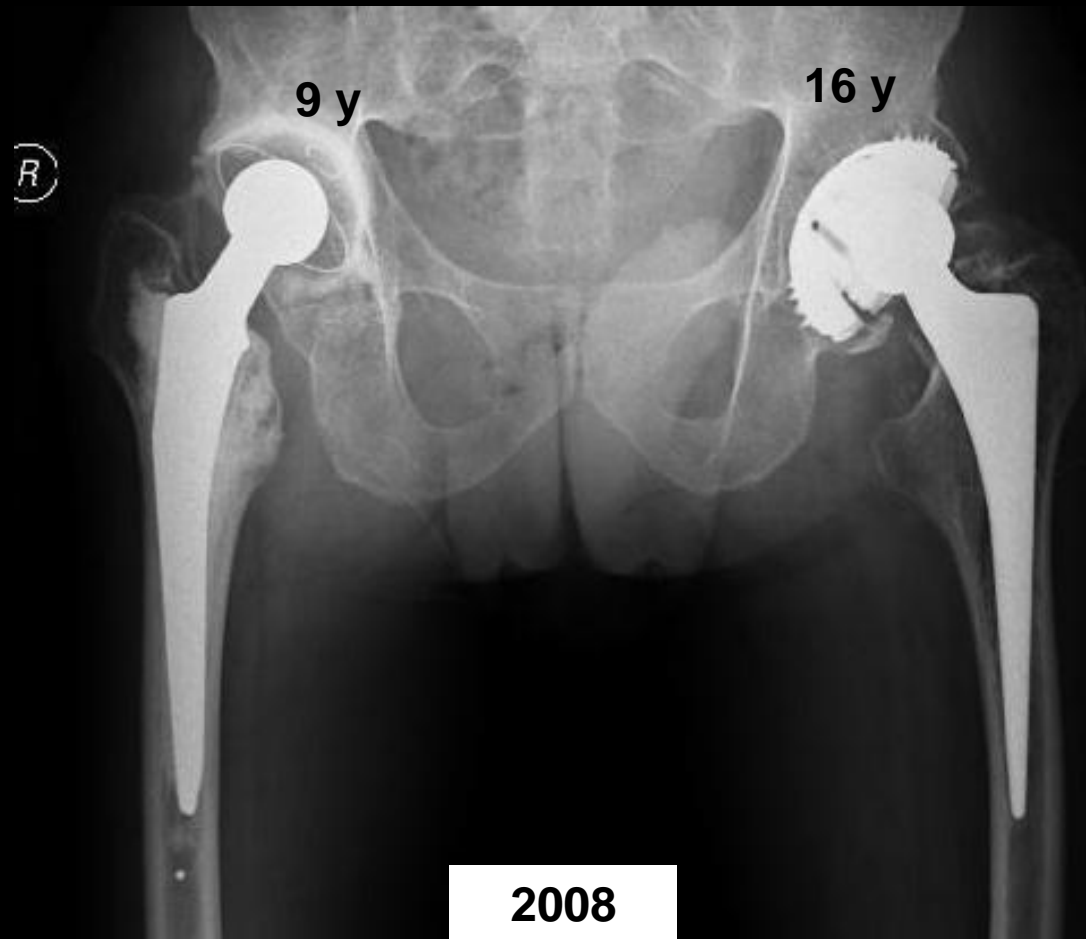
Assintomática



JFP masculino, 90 anos de idade compli. cardiacas (feve. 2006)

24 anos





PU 193010....., dupla cúpula 15 anos,, revisão com anel de sustentação e haste cimentada20 anos de evolução



Sexo feminino

45 anos

11 anos

27 anos

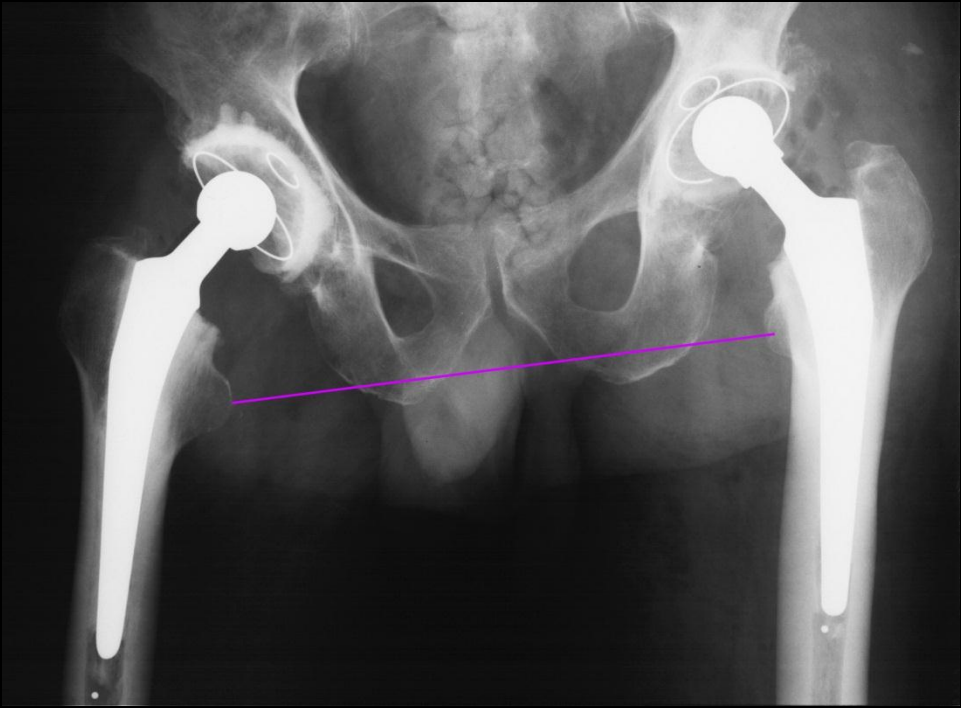
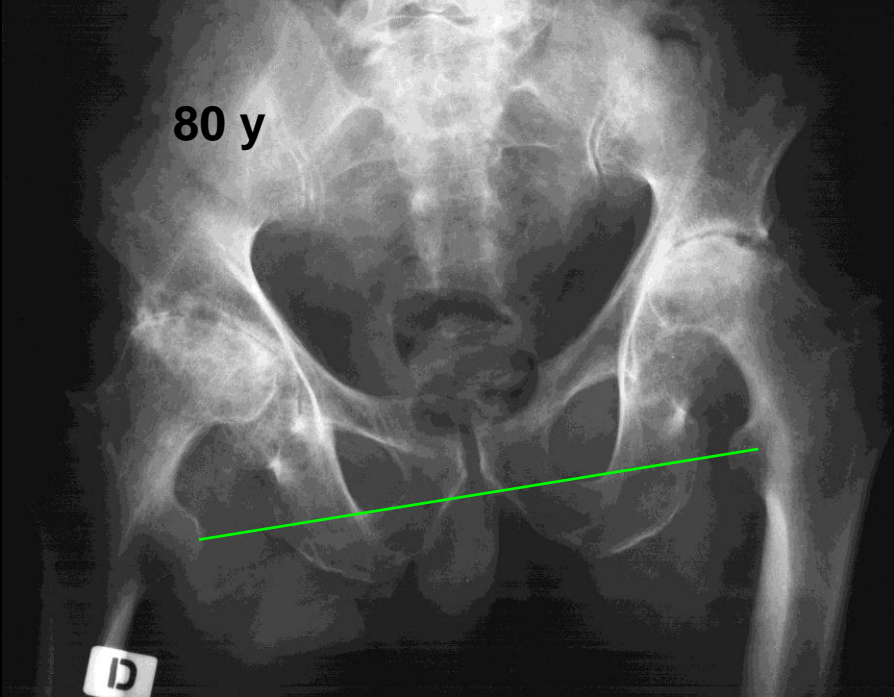
Haste de Lord

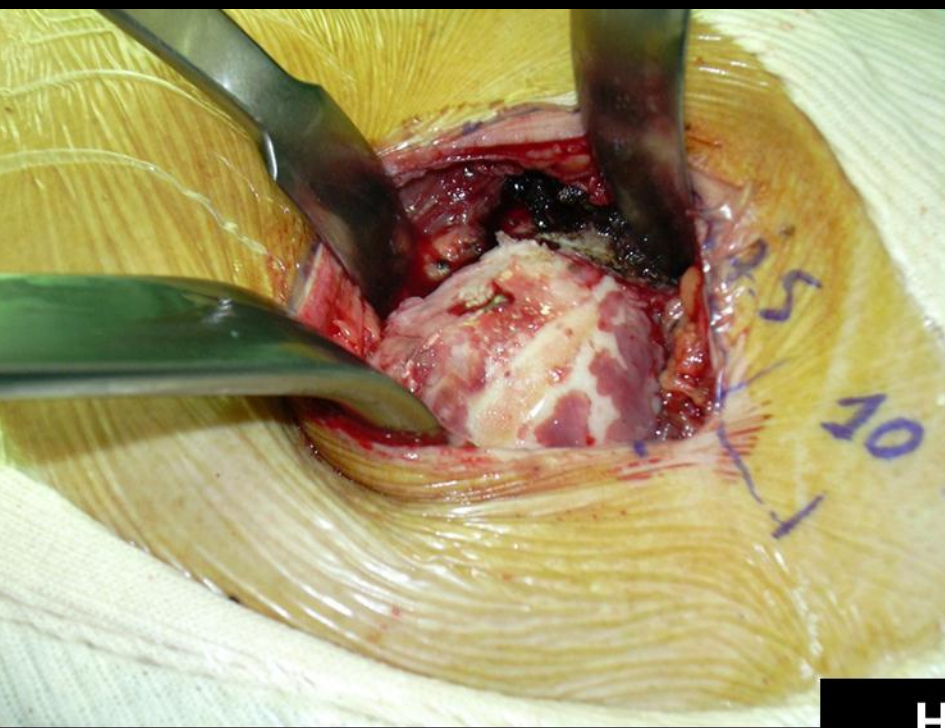
2008



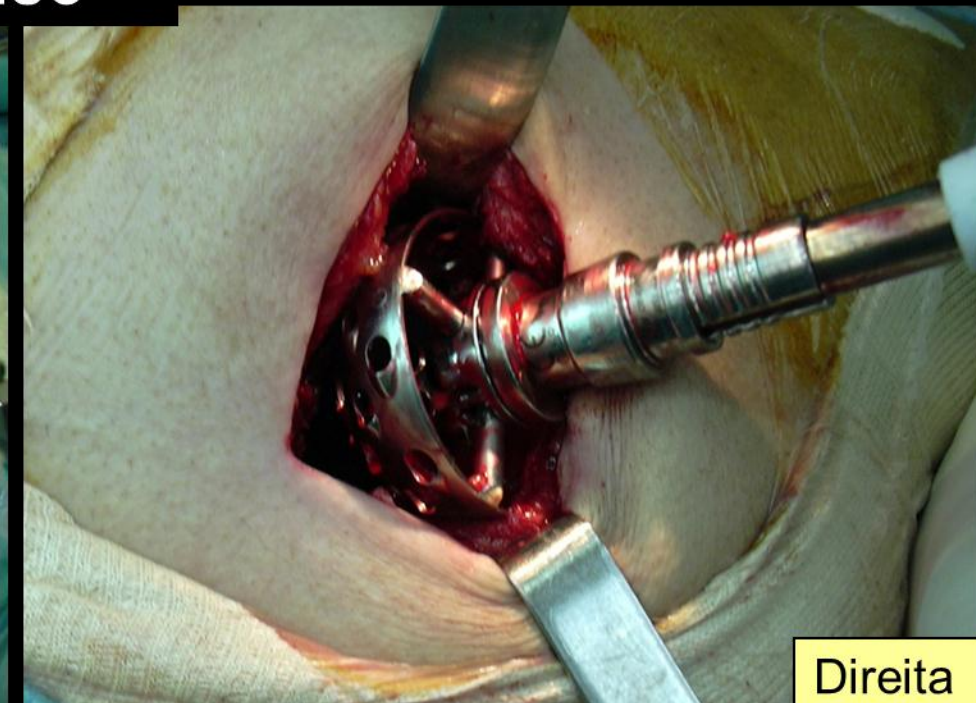
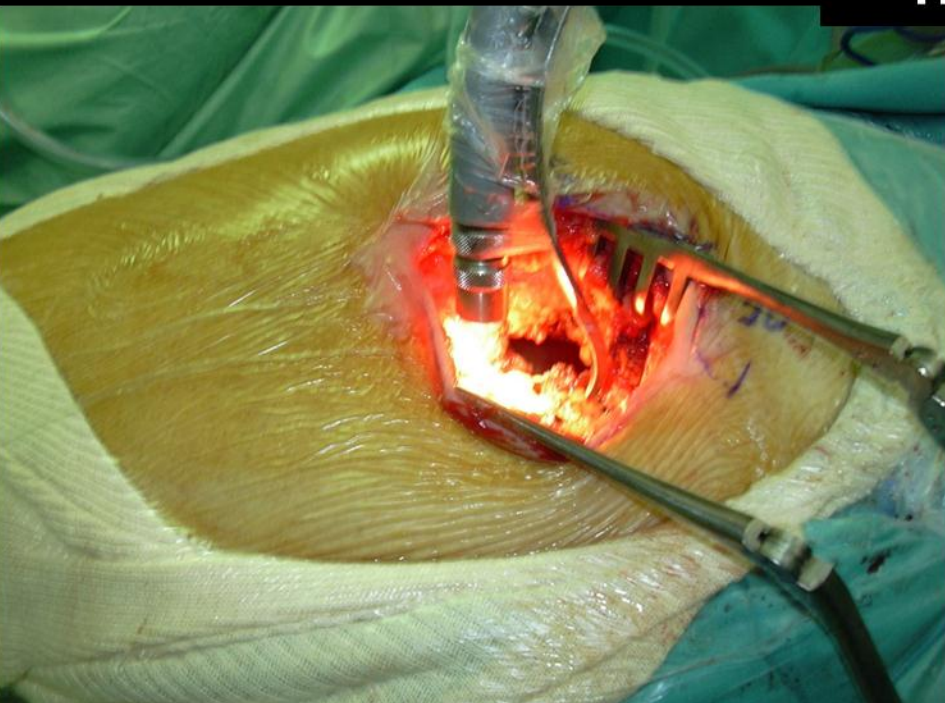
PTA cimentada no mesmo tempo cirúrgico

Mini-incisão

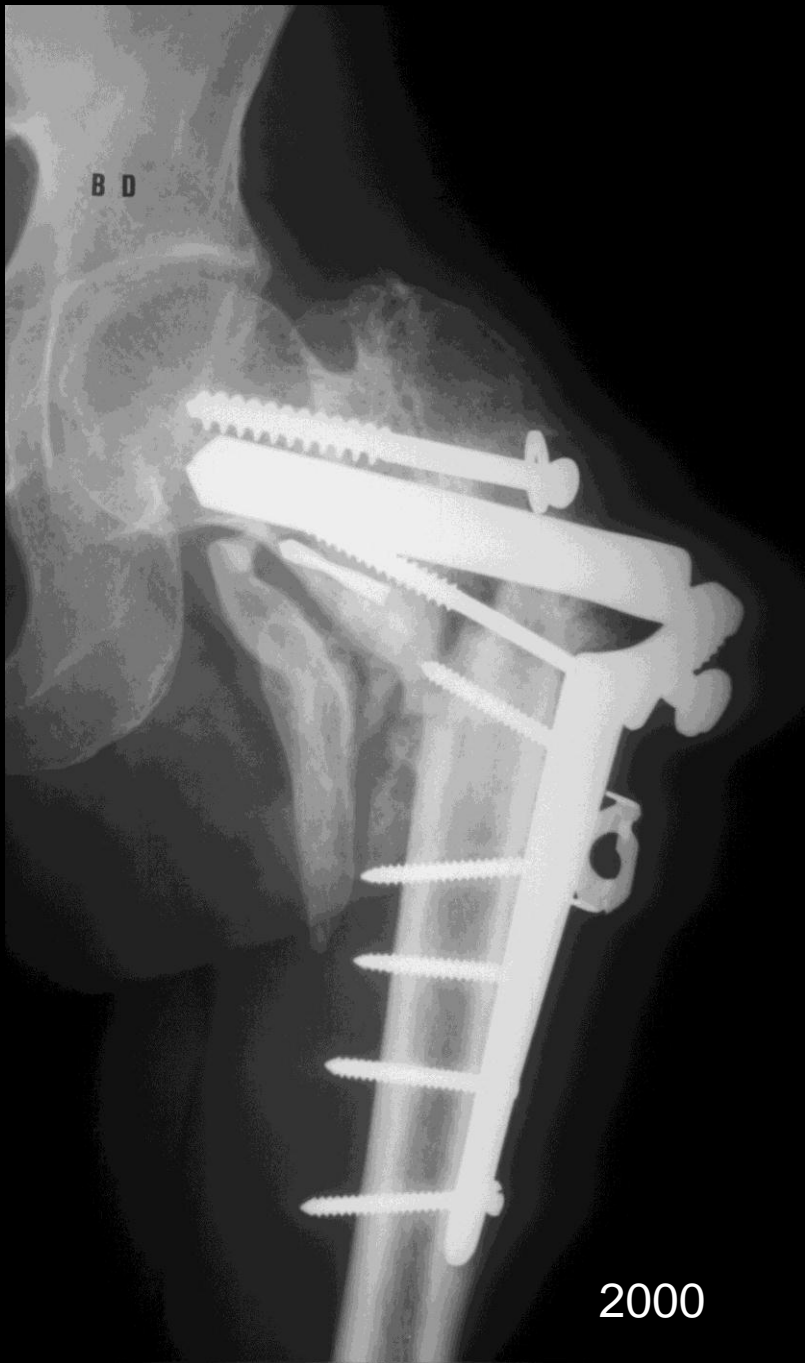




HUC



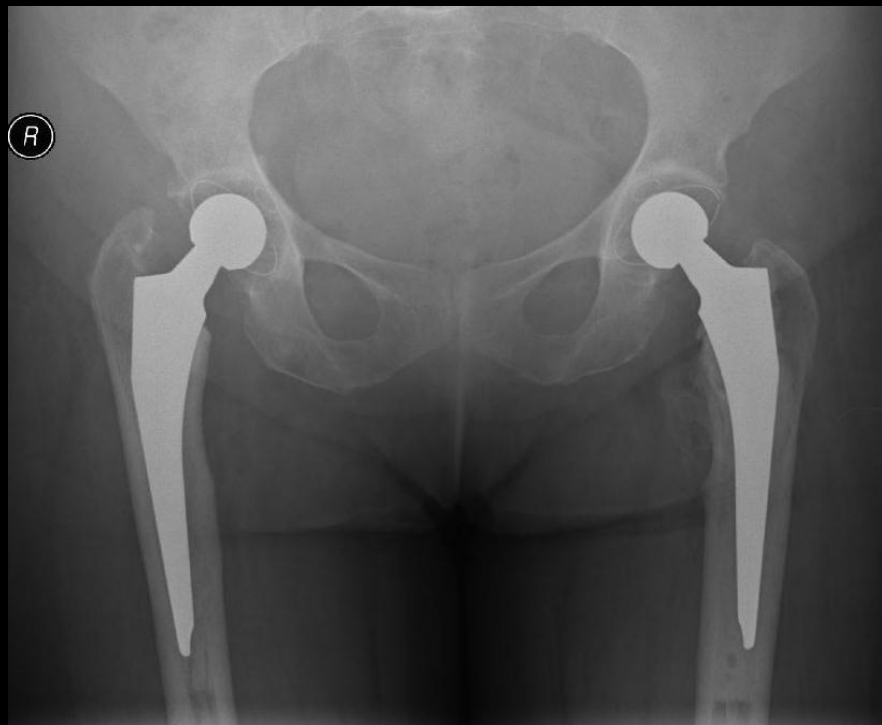
Direita



2000

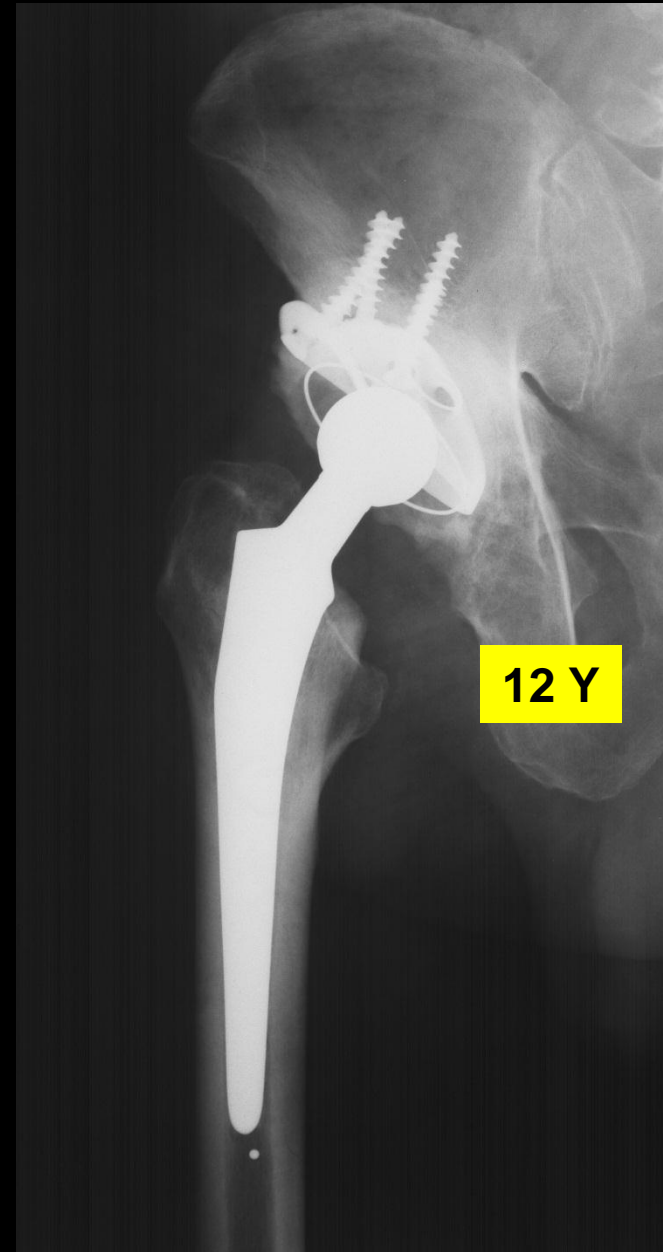


Aplicar implantes que permitam “off-set” e ângulação adequados



Ancas em varo

Acetábulo com esclerose subcondral intensa, anel de reconstrução acetabular





APAMD, sexo feminino, 35 anos de idade
DISPLASIA

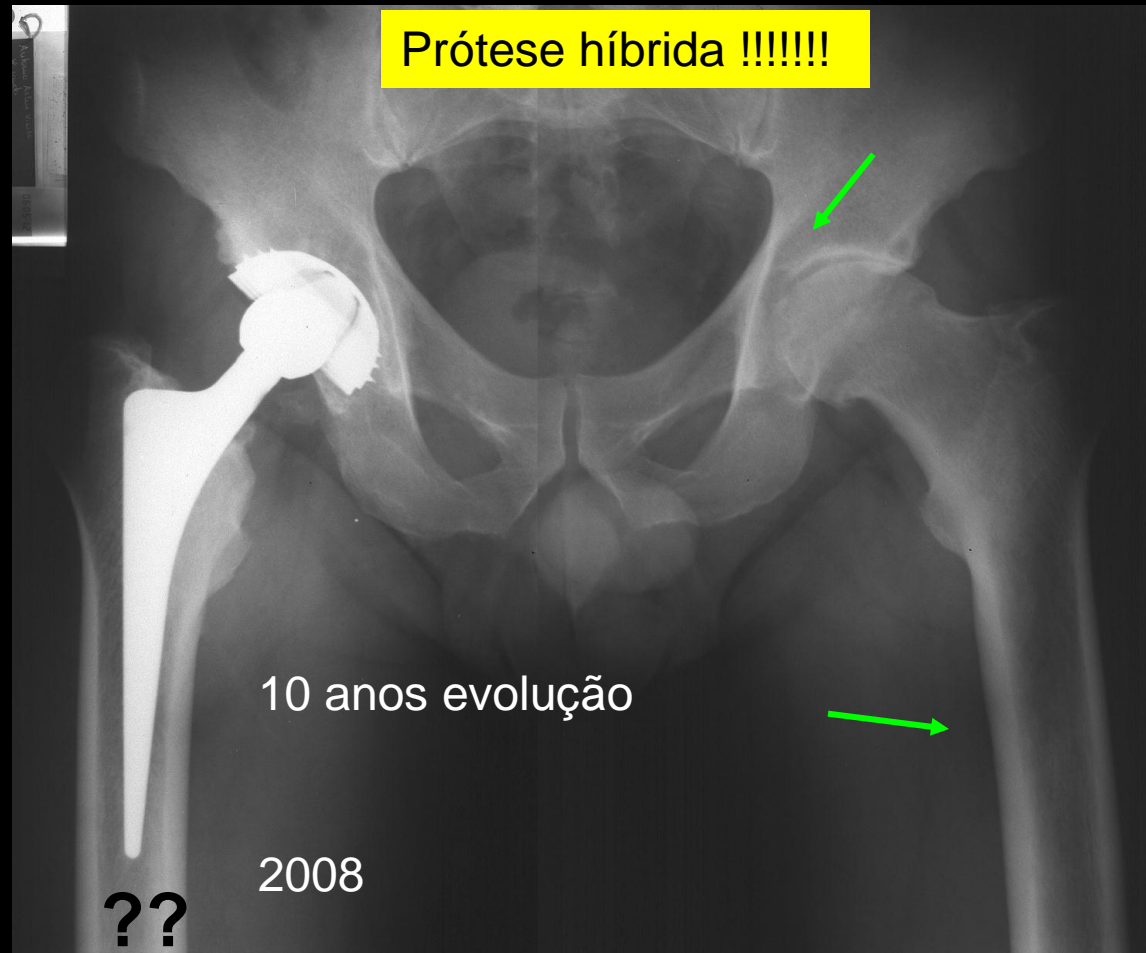
SERVIÇO DE IMAGIOLÓGIA
Nome: **Lucia Maria** classe 3
Exame n.º: **5460** Unid.: **M** Dir.:
Instrumentado: Anestesiado:
Data: **22/02/2011**



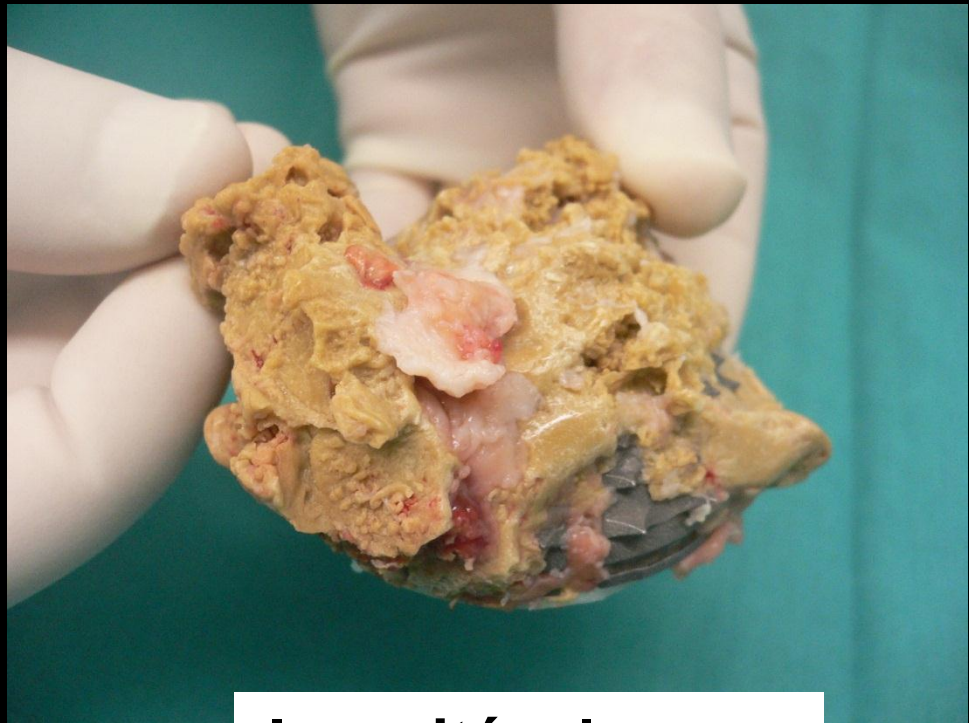
APAMD, sexo feminino, 35 anos de idade
4 meses depois 2º tempo

R

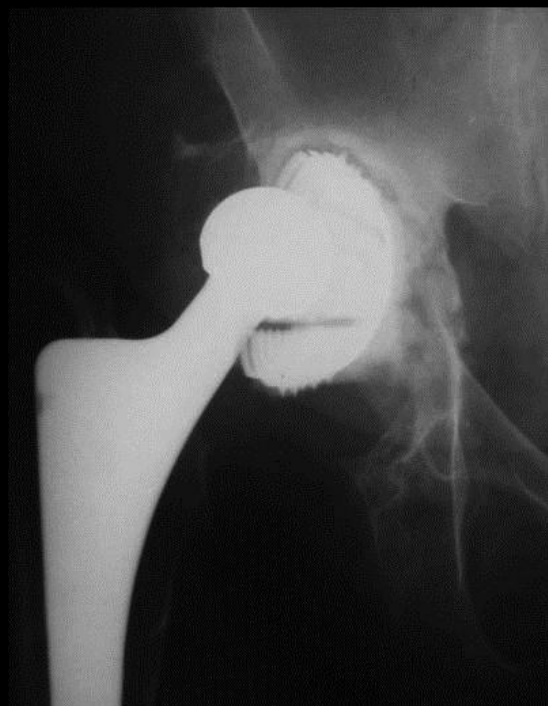
MJRA – EA, 1999.



Acetábulo para cúpula não cimentada e fémur com morfologia para haste cimentada (cilindrico)



Inaceitável cimentar
cúpula expansiva



Is Cement Still a Fixation Option for Total Hip Arthroplasty?

Michael H. Huo, MD, and C.J. Osier, MD

From the Department of Orthopedic Surgery, University of Texas Southwestern Medical Center, Dallas, Texas.

In conclusion, the published evidence suggests that cement fixation remains excellent and even superior to cementless fixation for the general population with respect to femoral stem fixation. The results of cemented cups have been inferior to cementless fixation in most published reports. Cementless fixation in THA, however, has demonstrated continued improvement in durability.

Number of Primary THR per Type of Fixation and Age

1992-2003

Diagnosis	< 50 years	50-59 years	60-75 years	> 75 years	Total	Share
Cemented	2,807 46.6%	11,403 68.3%	60,971 94.7%	40,679 98.6%	115,860	90.3%
Hybrid	1,354 22.5%	2,812 16.8%	2,247 3.5%	287 0.7%	6,700	5.2%
Uncemented	52% 1,532 25.4%	1,894 11.3%	665 1.0%	15 0.0%	4,106	3.2%
Reversed hybrid	273 4.5%	513 3.1%	271 0.4%	33 0.1%	1,090	0.8%
(missing)	55 0.9%	85 0.5%	202 0.3%	241 0.6%	583	0.5%
Total	6,021 100%	16,707 100%	64,356 100%	41,255 100%	128,339	100%

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ANNUAL REPORT 2003

The Swedish National Hip Arthroplasty Register

PTA/ Ano 10 695

Swedish Hip Arthroplasty Register

Annual Report 2006

Number of Primary THRs per Type of Fixation and Age 1992-2006

Type of Fixation	< 50 years		50-59 years		60-75 years		> 75 years		Total	Share
Cemented	3,288	40.7%	14,545	64.5%	80,303	93.6%	52,448	98.7%	150,584	88.8%
Hybrid	1,723	21.3%	3,292	14.6%	2,810	3.3%	363	0.7%	8,188	4.8%
Uncemented	2,377	29.4%	3,254	14.4%	1,587	1.8%	75	0.1%	7,293	4.3%
Reversed Hybrid	644	8.0%	1,419	6.3%	1,024	1.2%	134	0.3%	3,221	1.9%
(missing)	48	0.6%	42	0.2%	106	0.1%	141	0.3%	337	0.2%
Total	8,080	100%	22,552	100%	85,830	100%	53,161	100%	169,623	100%

58,7%

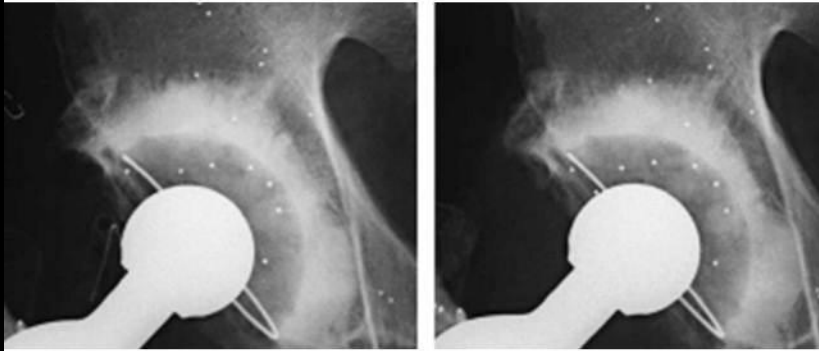
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Number of Primary THRs per Type of Fixation and Year — 60 Years or Older

Type of Fixation	1992-2001	2002	2003	2004	2005	2006	Total	Share
Cemented	82,102	9,904	9,826	10,196	10,492	10,231	132,751	95.5%
Hybrid	2,150	199	197	180	202	245	3,173	2.3%
Uncemented	476	86	119	211	298	472	1,662	1.2%
Reversed Hybrid	134	58	111	178	281	396	1,158	0.8%
(missing)	194	11	2	8	8	24	247	0.2%
Total	85,056	10,258	10,255	10,773	11,281	11,368	138,991	100%

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As próteses que implantamos



Cimentação

Técnica de 3ª geração

Charnley..... Charnley Élite

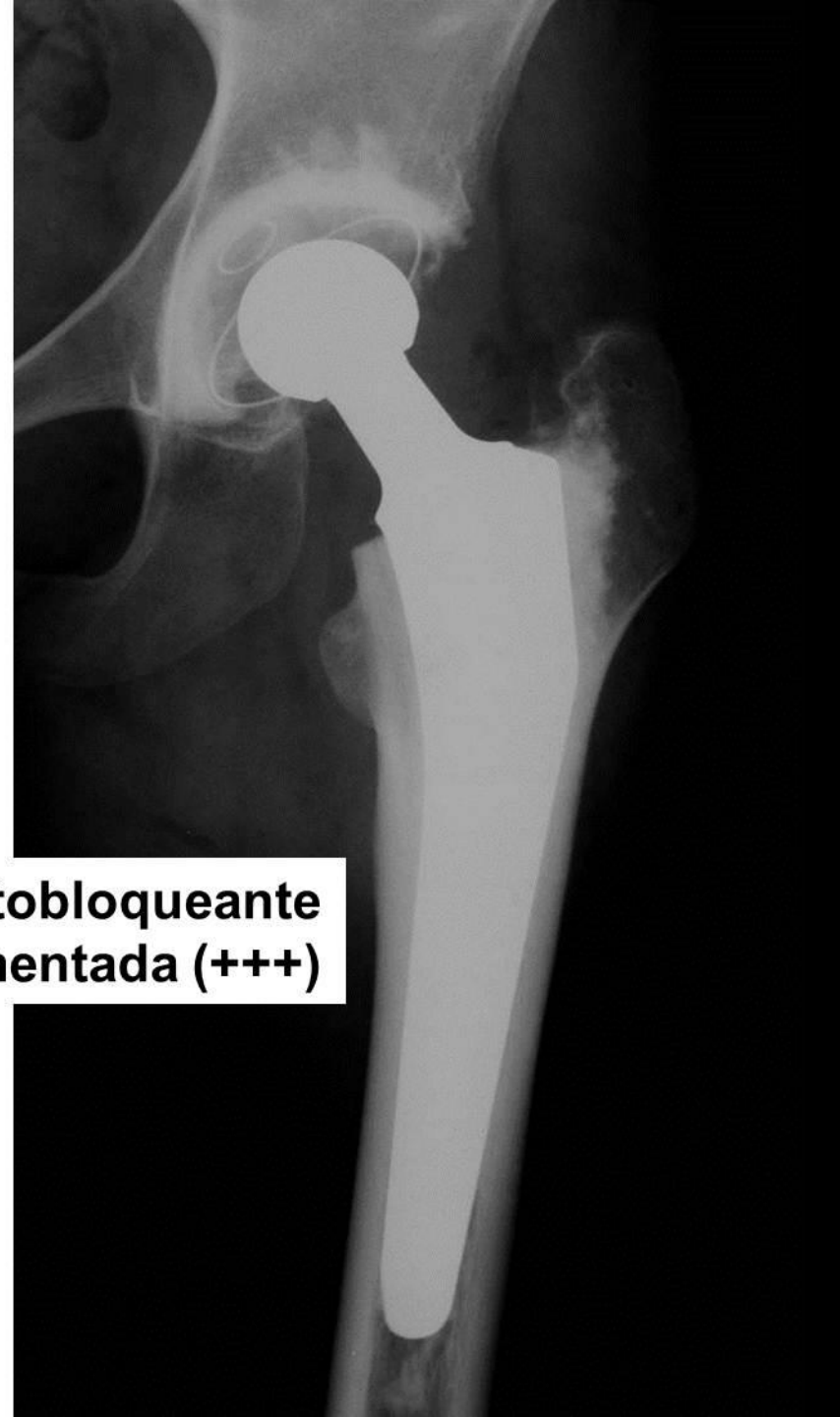
Lubinus SP ...Lubinus SPII

Exeter

Charnley-Kerboull ...CM

MS30

Charnley-Müller...Müller



**Autobloqueante
cimentada (+++)**

Não cimentadas grandes diâmetros (+)

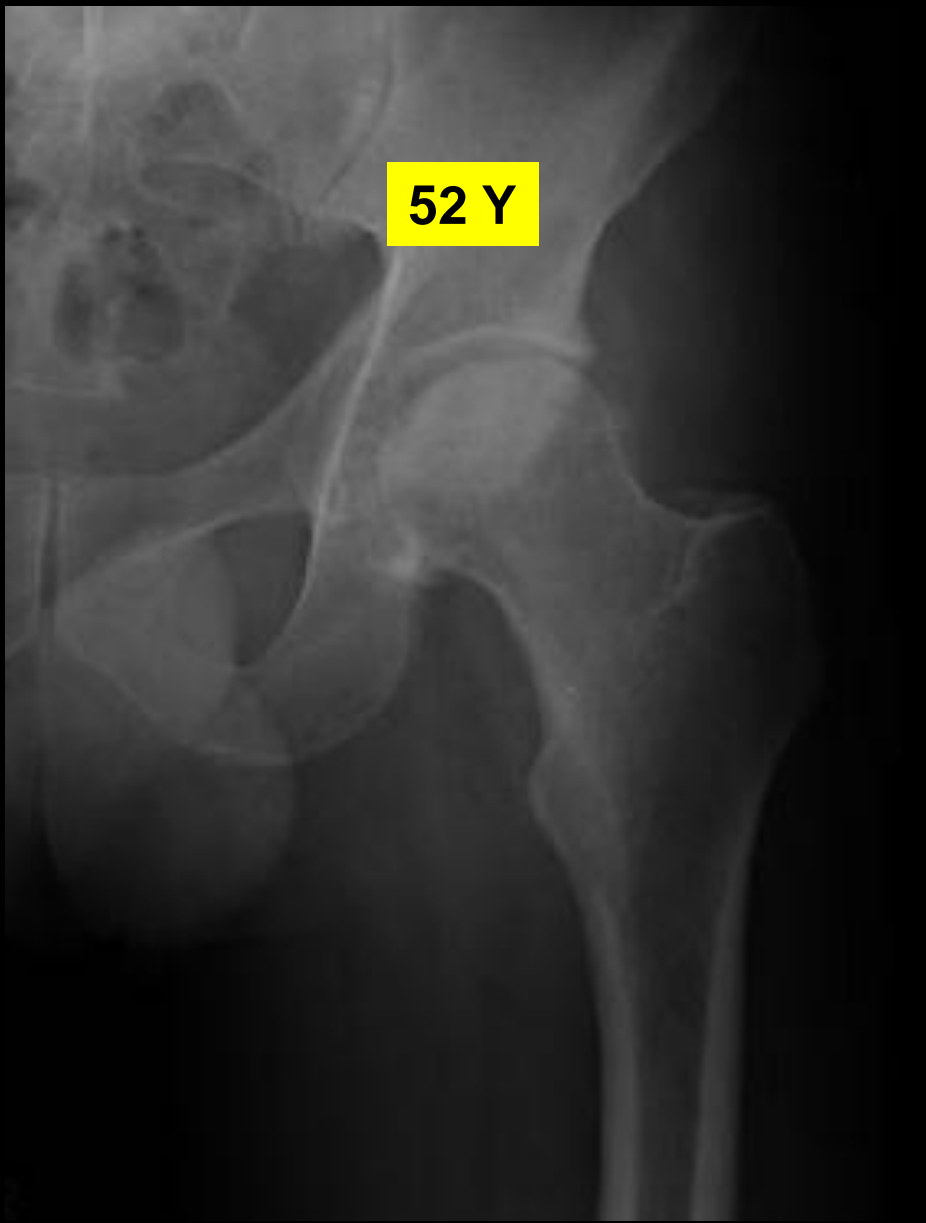


MSCS, 30 Y, artrite reumatóide, ♀



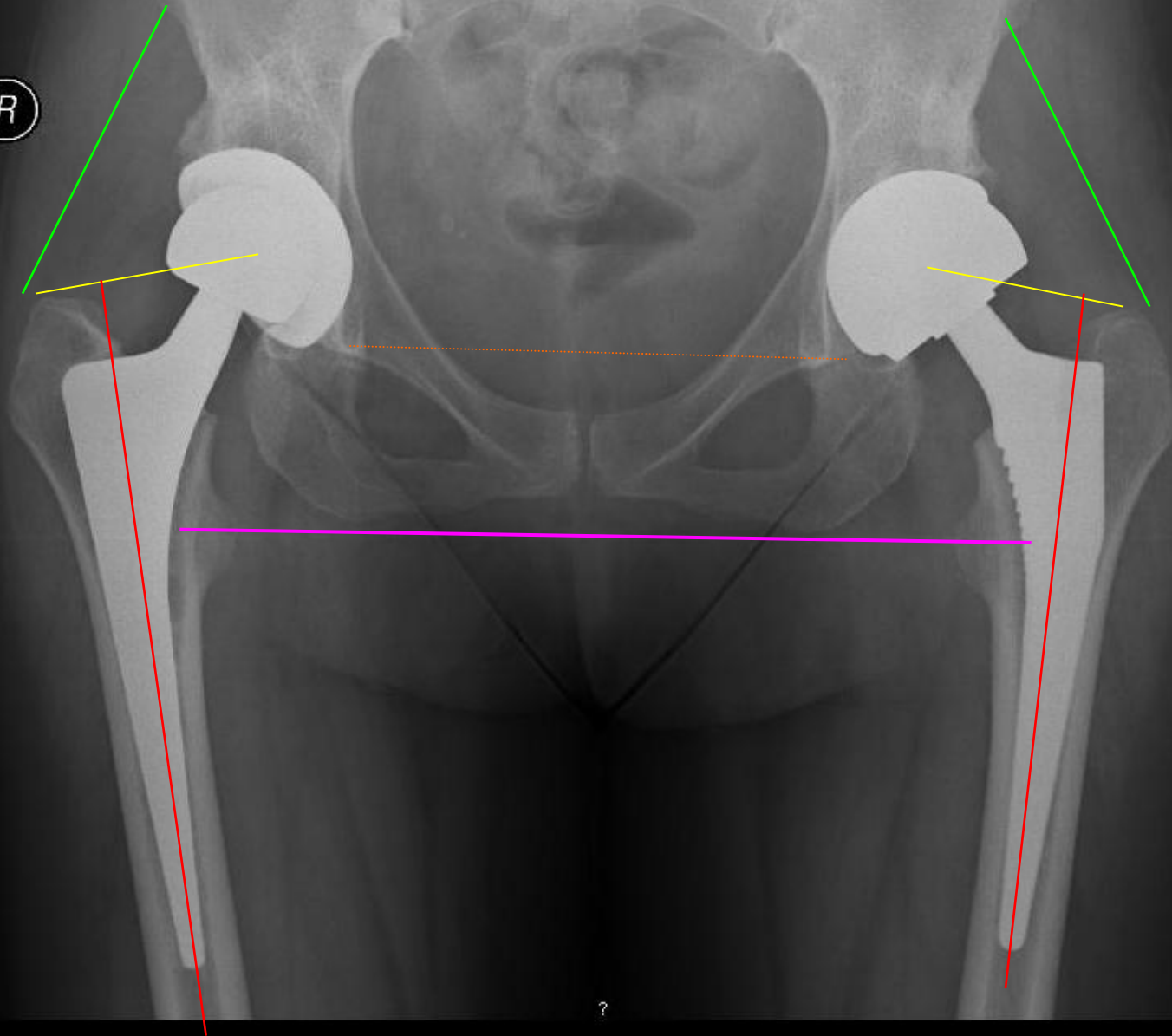
2008

52 Y



IMBR PU 1960.....2008

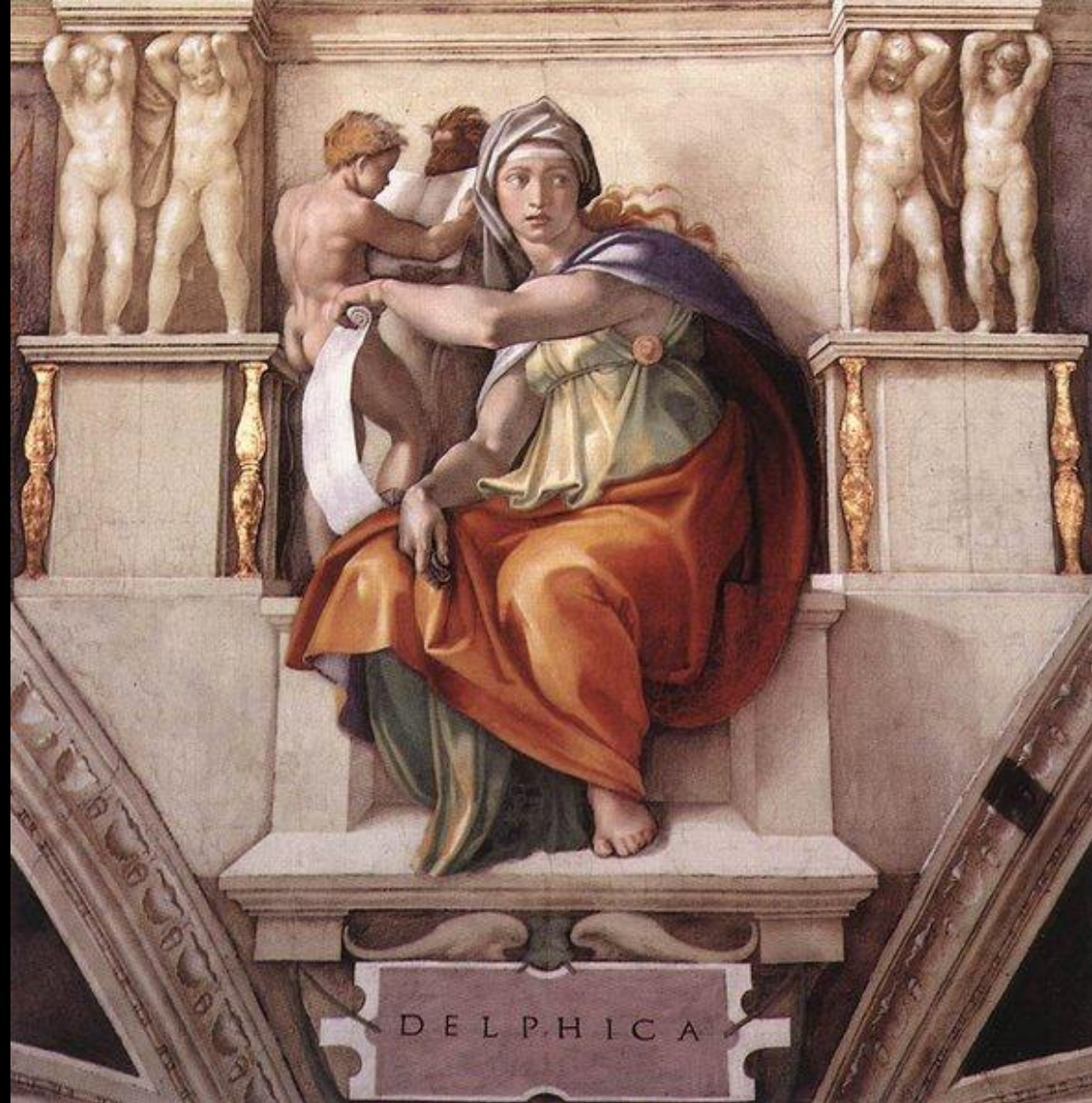
R



Idade dos pacientes ????
O oráculo de Delfos já não existe



Apollo. Roman statue by Apollonius. Photo ©Maicar Förlag-GML



Cada caso é um caso

Tentar evitar as complicações sempre que seja possível !

Técnica cirúrgica correcta

Implante mais recomendado

.....A melhor operação deve ser a mais apropriada para o problema do paciente e não a mais apropriada para as limitações existentes (financeiras, implantes disponíveis / cirurgião)

Perante uma anca destruída e dolorosa ou em condição de anquilose, só a prótese total pode trazer uma solução funcional eficaz e duradoira

A artroplastia total da anca representa uma das intervenções de maior sucesso em Ortopedia

Não obstante encontrarmo-nos na parte superior de uma curva de progressão assintótica, a prótese da anca continuará a registar progressos. Uma melhoria dos resultados clínicos supõe o aperfeiçoamento dos sistemas já existentes e a optimização da técnica cirúrgica, mais do que o desenvolvimento de novos implantes.