MicroHip

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Orthopädisches Zentrum Münsingen

Orthopädisches Zentrum Münsingen

MicroHip

- Orthopädische Chirurgie
  - Eine Revolution bahnt sich an

Daily Mail, Thursday, October 2, 2003 Page 35

Woman given a new hip is walking in three hours

By **Beezy Marsh** and **Angela Brooks**

A REVOLUTIONARY surgical technique is easing the misery of hip replacements.

The keyhole method slashes the time needed to recover from 11 days to just over 24 hours.

Patients are up and walking three hours after the operation. Next day they are well enough to go home with only slight pain and minimal bruising.

Experts estimate the procedure could save the Health Service as much as £77million by reducing hospital stays.

British patients have already been treated with the minimally-invasive procedure, called the 2-incision.

The first was Shirley Mattin, 68, who suffers the crippling condition osteoarthritis.

She was treated two weeks ago at Chase Farm Hospital in Enfield, North London, by orthopaedic surgeon Howard Ware, who brought the technique to Britain from the U.S., where it was invented.

Mrs Mattin, who lives with her husband Brian near Potters Bar, Hertfordshire, had already had one hip replaced last year with conventional treatment.

She said: 'Mr Ware approached me about this new mini hip replacement because he felt I would be a good candidate.

"He said it would be much easier for me afterwards because I'd have far less pain, swelling, bruising and I would be discharged from hospital after a very short stay.'

Thirty minutes after she got herself dressed to go home after a final examination.

She said: 'I have had no pain although I was a little sore. I had a very faint bruise, the size of a 50p piece, on my thigh – but that is the extent of it.'

A district nurse has visited Mrs Mattin daily to change her dressings and give an injection of heparin to prevent blood clots. The stitches were removed a week or so after surgery.

Surgeon Mr Ware said: 'This large incision down the side of the upper thigh to expose the hip joint.

Recovery from this gruelling surgery tends to be slow and is accompanied by considerable pain, heavy swelling and bruising, which is why an 11-day hospital stay for the procedure is the norm.

The new mini-incision hip surgery does the identical job using the same implants, but via a two-inch incision on the thigh and another incision and lined with a metal cup and a plastic lining.

Through the second incision on the upper thigh, surgeons stabilise the thigh bone with a metal stem by widening the canal in the thigh bone with a drill which cuts from the side, not the tip.

With the stem tapped snugly into place, it is then first locked into the ball and then snapped into the socket – to replicate exactly the ball and

OLD METHOD

Thigh bone

NEW METHOD

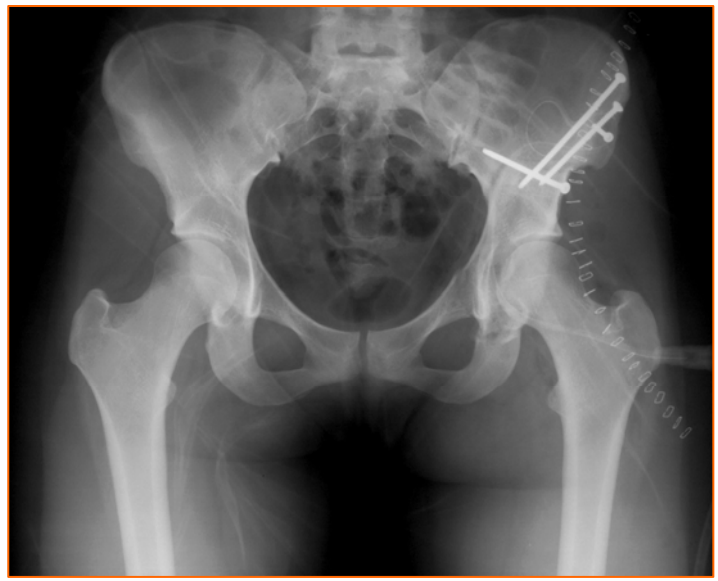
Artificial hip

SURGERY: Single 10–12 inch incision in thigh. Muscles cut to access and replace the hip joint. **RESULT:** Recovery painful and slow as muscles heal. Up to 11 days in hospital.

SURGERY: Two incisions about 1–2inches long. Muscles moved aside as, guided by X-ray, surgeon cuts head off bone and inserts artificial hip. **RESULT:** Less damage, less pain, smaller scars. Patients can leave hospital in under two days.

MicroHip

- Grosse Chirurgen grosse Schnitte



Orthopädisches Zentrum Münsingen

MicroHip

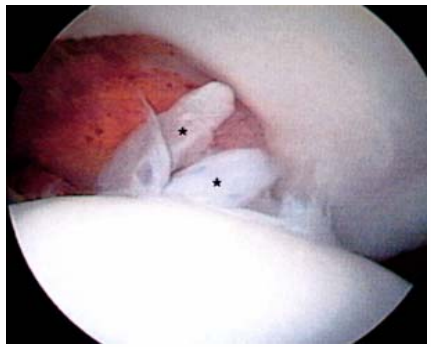
- Grosse offene Operation

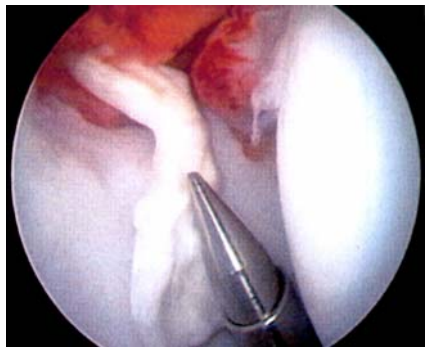
• Operation	2-3 h
• Spital	10-14 Tage
• Gehstöcke	2-3 Mt
• Arbeitsausfall	Monate
• Kosten:	20-30‘000Fr.

Orthopädisches Zentrum Münsingen

MicroHip

- Arthroskopie





Orthopädisches Zentrum Münsingen

MicroHip

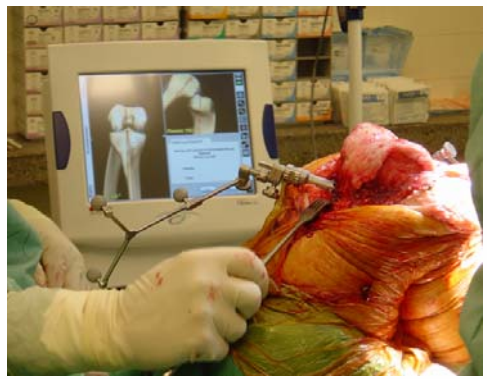
- Kleine arthroskopische Operation

• Operation	1/2 h
• Spital	1Tage
• Gehstöcke	2-4 Tage
• Arbeitsausfall	ca. 2 Wochen
• Kosten:	2-3000Fr.
• Ca. 10 mal	günstiger

Orthopädisches Zentrum Münsingen

MicroHip

- Navigation CAS



Orthopädisches Zentrum Münsingen

MicroHip

- Das küstliche Hüftgelenk ist heute sehr gut
- Über 95% der Patienten sind sehr zu frieden
- Kann man etwas gutes noch besser machen?

Orthopädisches Zentrum Münsingen

MicroHip

Orthopädisches Zentrum Münsingen

MicroHip

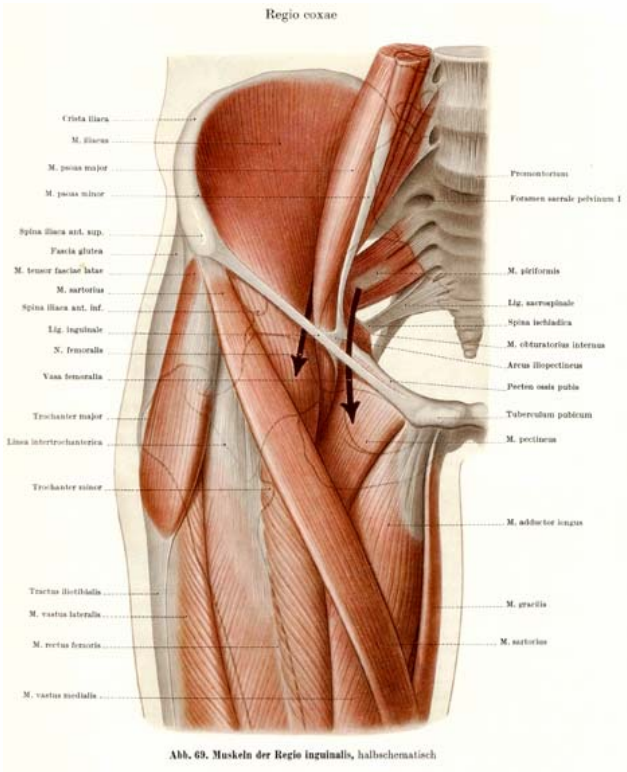
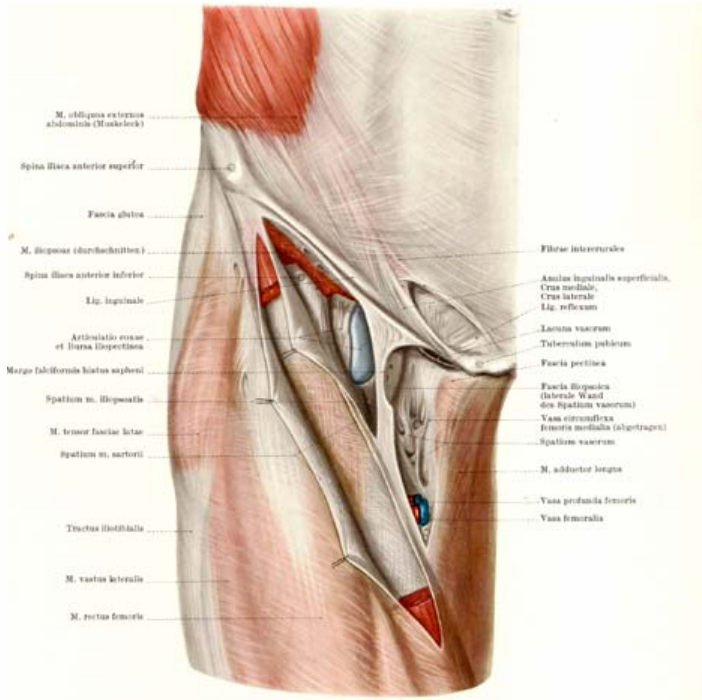


Abb. 69. Muskeln der Regio inguinalis, halbschematisch



Orthopädisches Zentrum Münsingen

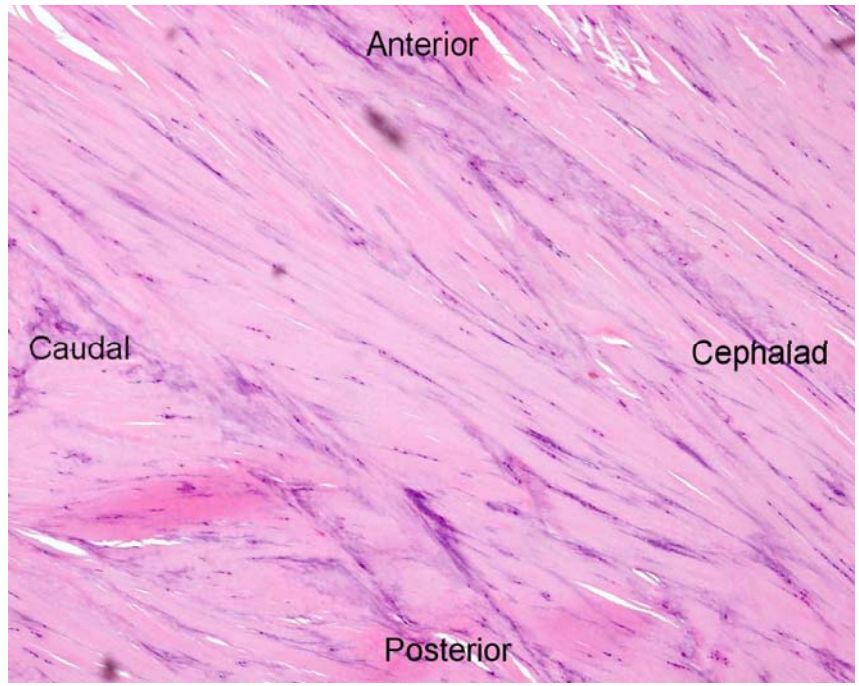
MicroHip

- Ein Gelenk allein bewegt nicht
- Es sind nur die Muskeln und Sehnen die unsere Bewegung erst möglich machen

Orthopädisches Zentrum Münsingen

MicroHip

- Gesteuert werden die Muskeln von den Nervenfasern



Orthopädisches Zentrum Münsingen

MicroHip

- Will man versuchen ein künstliches Hüftgelenk noch besser zu machen, so muss versucht werden **Muskeln**, **Sehnen** und **Nervenfasern** möglichst zu schonen

Orthopädisches Zentrum Münsingen

MicroHip

- Minimal invasive Chirurgie

- MIS
- Ein Schlagwort
  - oder die Zukunft

Orthopädisches Zentrum Münsingen

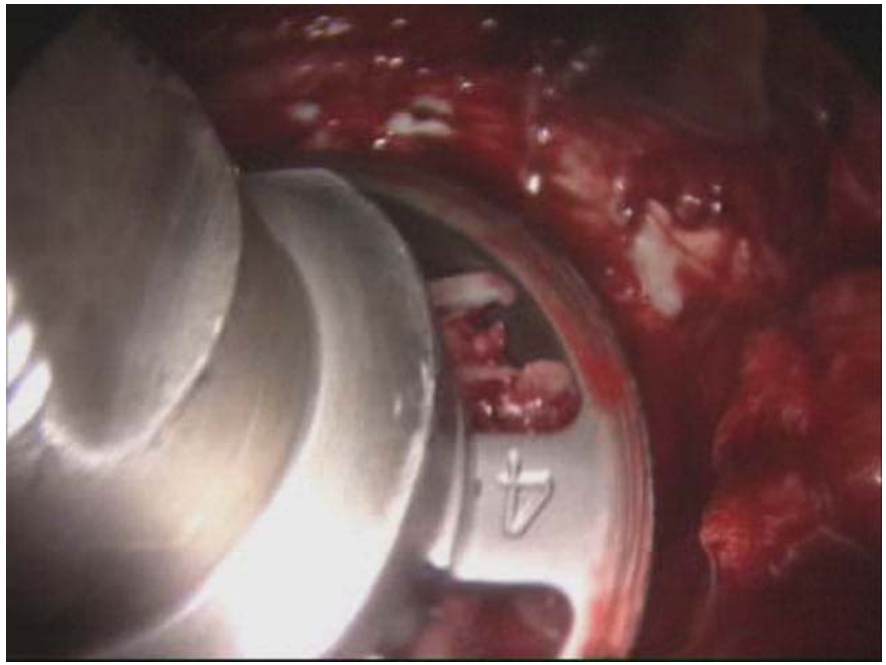
MicroHip

- Minimal invasiver endoprothetischer ventraler Ersatz des Hüftgelenkes
- Maximal biologisches Vorgehen unter Berücksichtigung der anatomischen Strukturen
- Keine Schädigung der Abduktoren Muskulatur

Orthopädisches Zentrum Münsingen

MicroHip

- Orthopädische Chirurgie
  - Eine Revolution bahnt sich an



Orthopädisches Zentrum Münsingen

MicroHip

- MicroHip
  - Minimal Invasive Surgery

Orthopädisches Zentrum Münsingen

MicroHip

- MicroHip
  - Möglichst lange ein aktives Leben ermöglichen

Orthopädisches Zentrum Münsingen

MicroHip

- MicroHip
  - Möglichst kleines Trauma
  - Wenig Blutverlust
  - Rasche Rehabilitation

Orthopädisches Zentrum Münsingen

MicroHip

- Wie soll dies erreicht werden?
  - Wenig Traumatisierung des Gewebes
  - Schonung der Anatomischen Strukturen
  - Kleiner Blutverlust
  - Perfekte Instrumente
  - Optimierte Imlantate

Orthopädisches Zentrum Münsingen

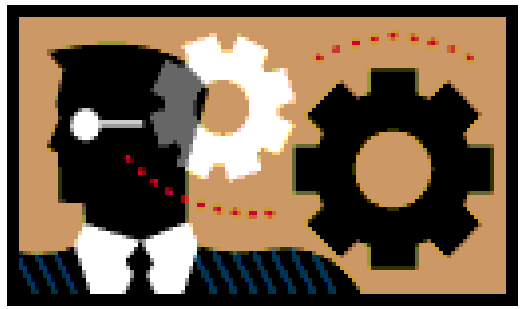
MicroHip

- Kleine Wunde

Orthopädisches Zentrum Münsingen

MicroHip

- Kleiner Zugang – kleineres Gesichtfeld
- Differenzierte Chirugie
- Anspruchsvolleres Instrumentarium



Orthopädisches Zentrum Münsingen

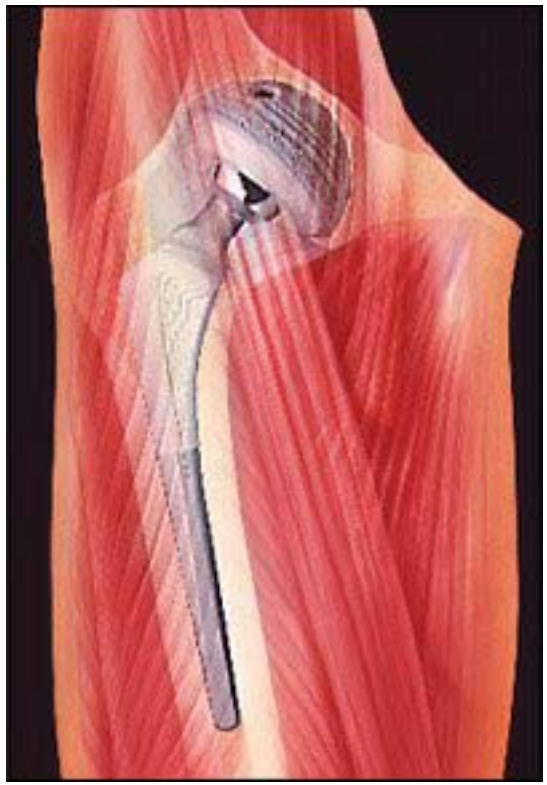
MicroHip

- Zugange
  - Ventral minimal invasiv
  - MicroHip Zugang

Orthopädisches Zentrum Münsingen

MicroHip

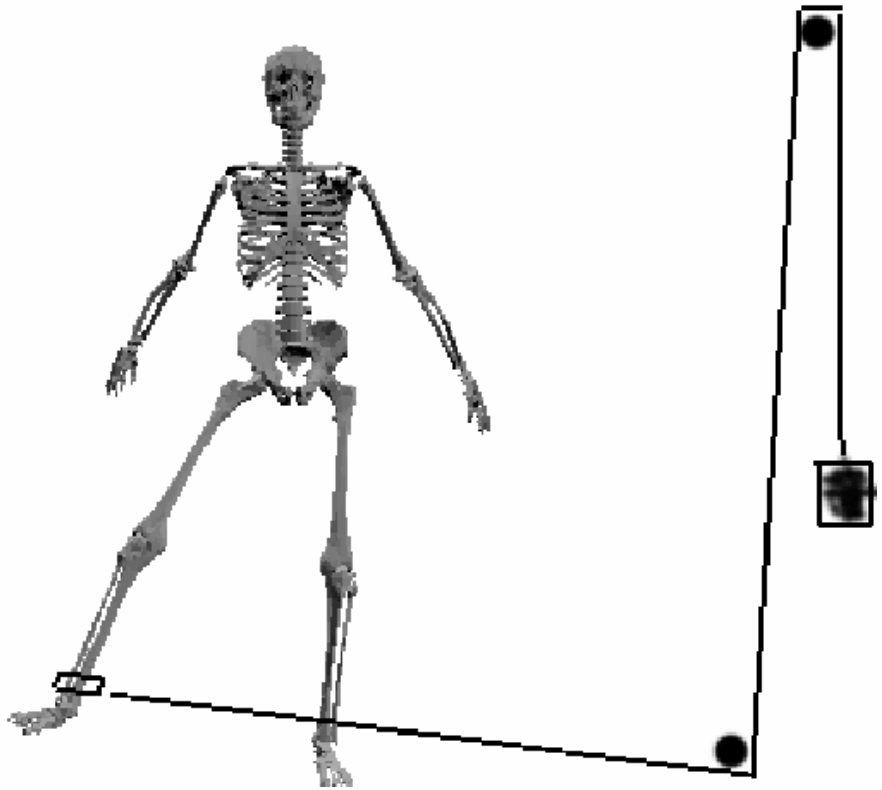
- Passive Bewegung
  - Hüftprothese
- Aktive Bewegung
  - Muskulatur



Orthopädisches Zentrum Münsingen

MicroHip

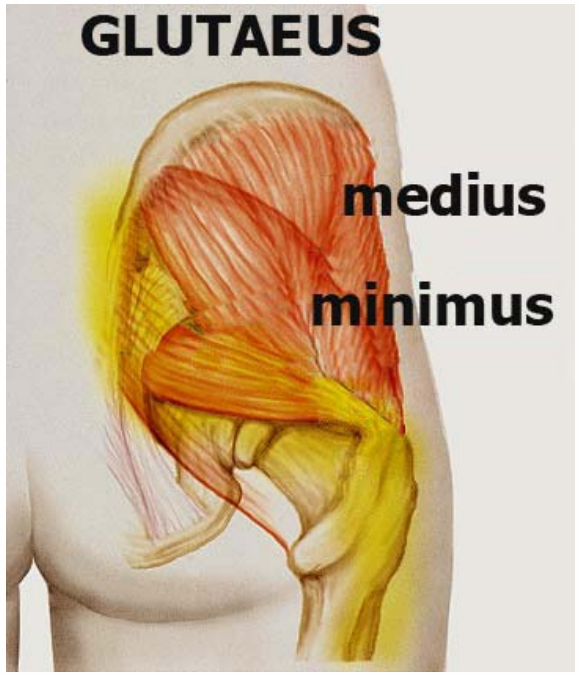
- Abduktoren-muskulatur



Orthopädisches Zentrum Münsingen

MicroHip

- Gluteal Muskulatur



Orthopädisches Zentrum Münsingen

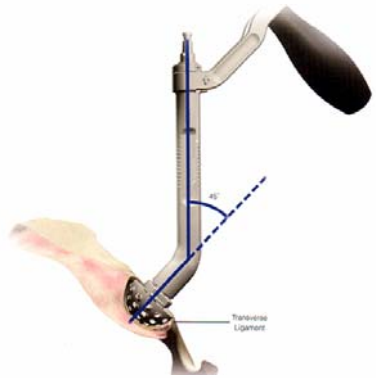
MicroHip

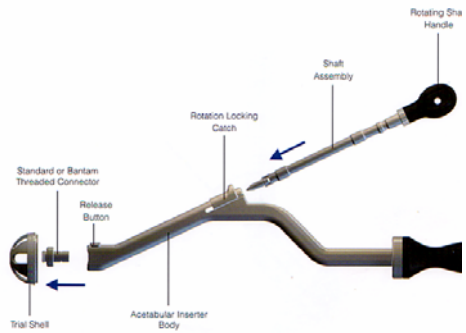
- MicroHip Zugang
  - Ventral der Abduktorenmuskulatur und des Musculus tensor fascia lata

Orthopädisches Zentrum Münsingen

MicroHip

- Auffräsen des Acetabulms mit einem Spezialinstrumentarium

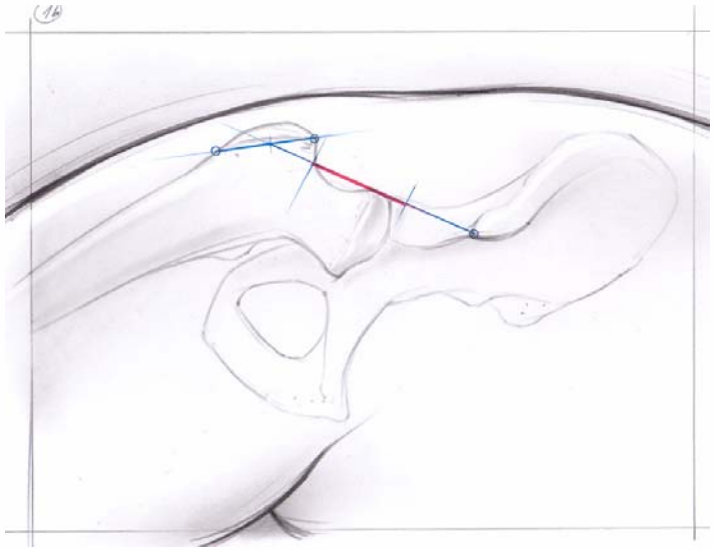




Orthopädisches Zentrum Münsingen

MicroHip

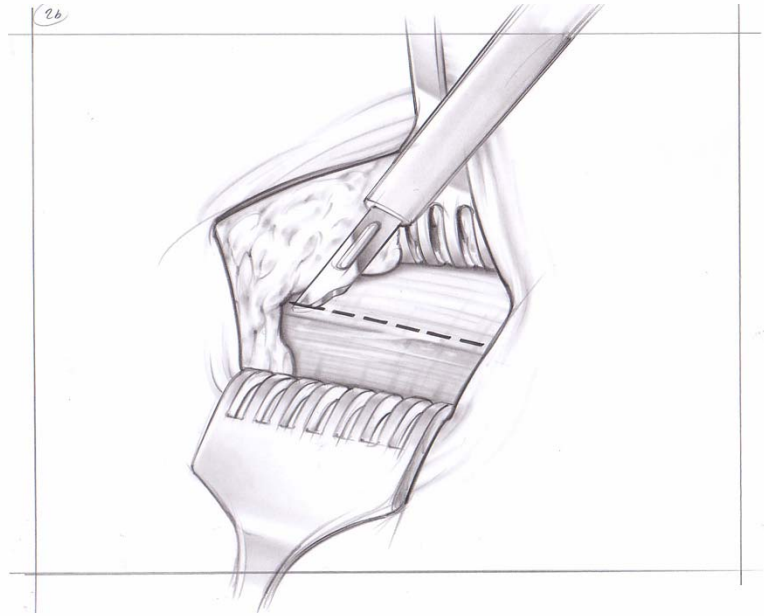
- MicroHip Zugang
  - Step 1
    - Inzision

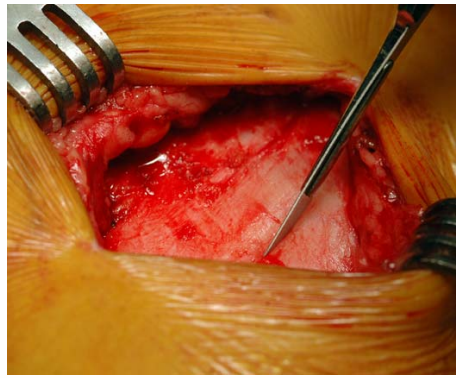


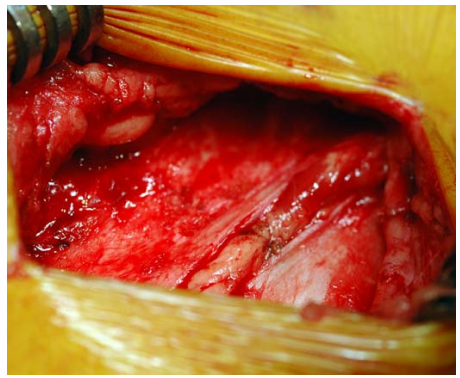
Orthopädisches Zentrum Münsingen

MicroHip

- MicroHip Zugang
  - Step 2
    - fascial inzision



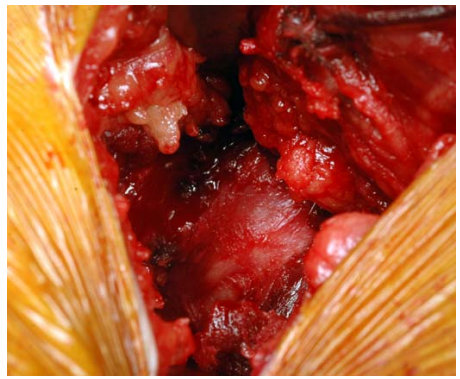


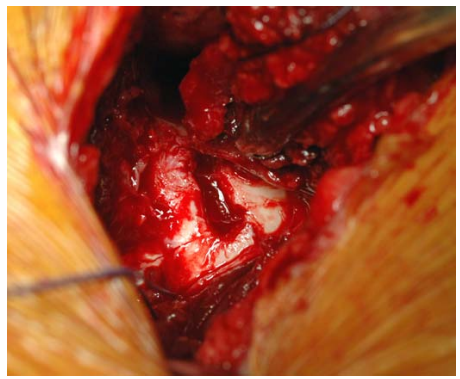


Orthopädisches Zentrum Münsingen

MicroHip

- MicroHip Zugang
  - Step 3
    - Darstellen und Inzision der Kapsel

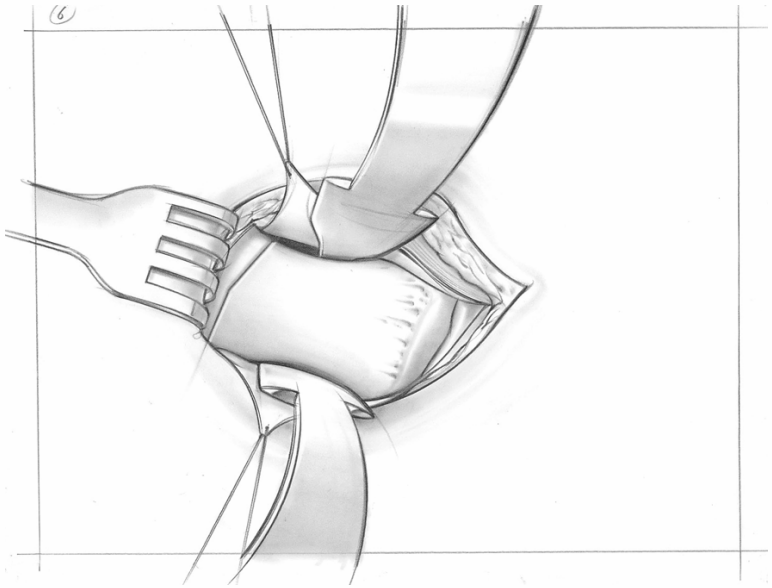


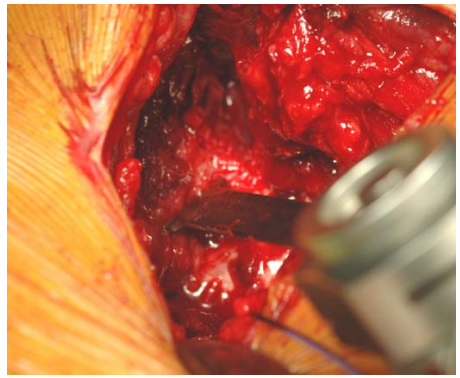


Orthopädisches Zentrum Münsingen

MicroHip

- MicroHip Zugang
  - Step 4
    - Osteotomie und Extraktion des Femurkopfes

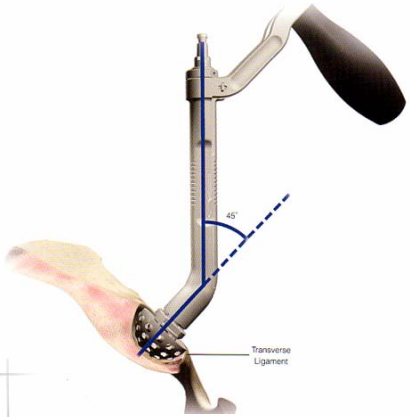


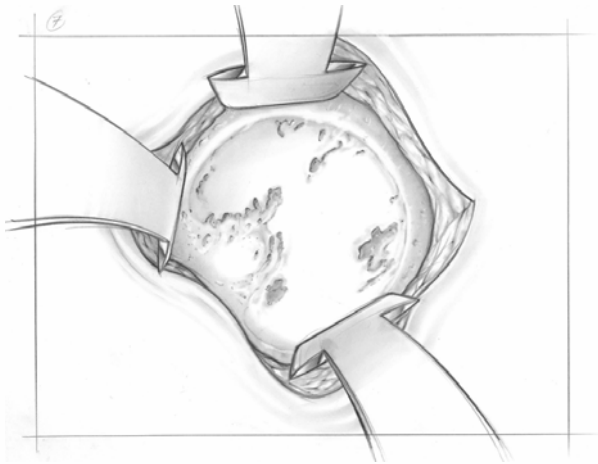


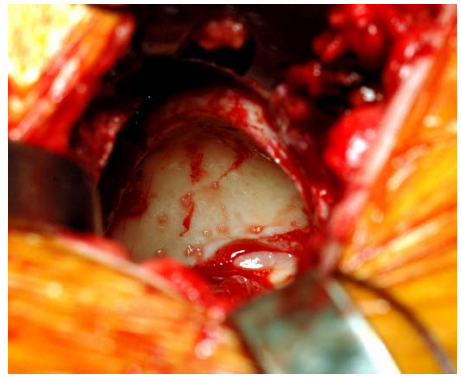
Orthopädisches Zentrum Münsingen

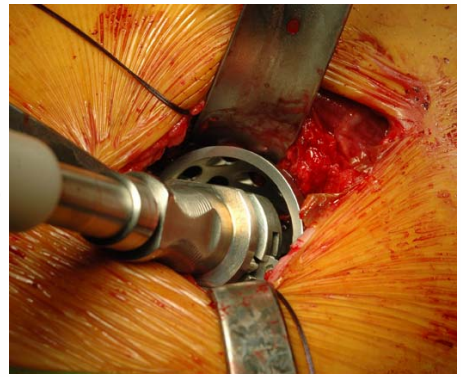
MicroHip

- MicroHip Zugang
  - Step 5
    - Acetabulum





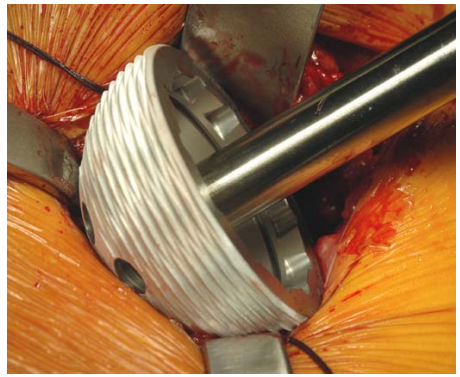


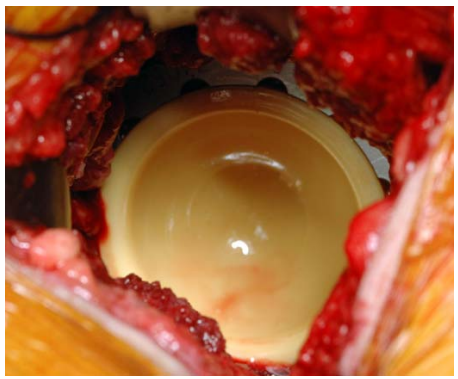


Orthopädisches Zentrum Münsingen

MicroHip

- MicroHip Zugang
  - Step 6
    - Implantation der Pfanne

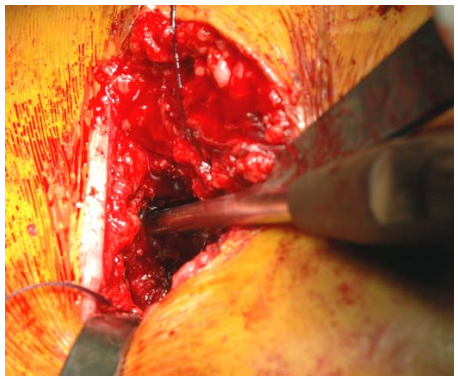


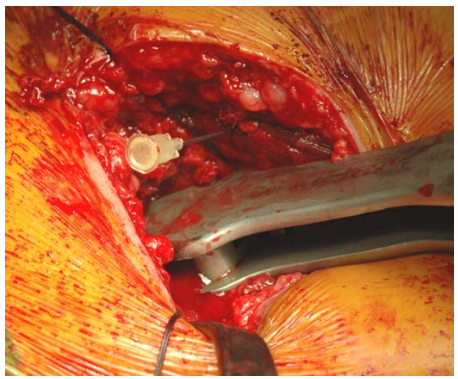


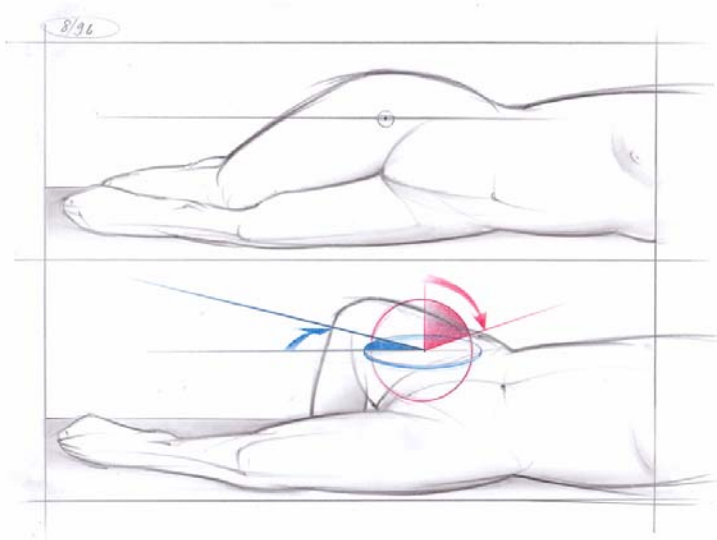
Orthopädisches Zentrum Münsingen

MicroHip

- MicroHip Zugang
  - Step 7
    - Darstellen des Femurs und Implantation der Femur Komponente



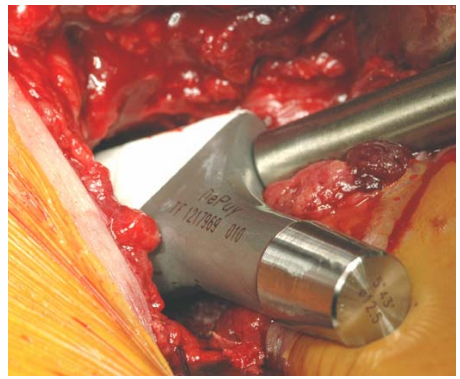


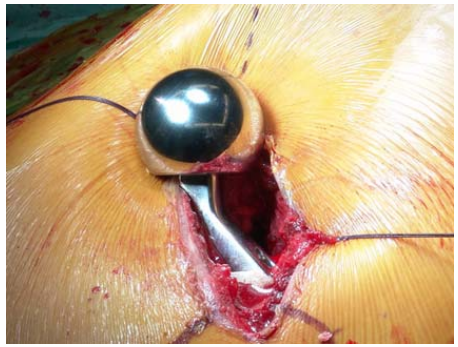


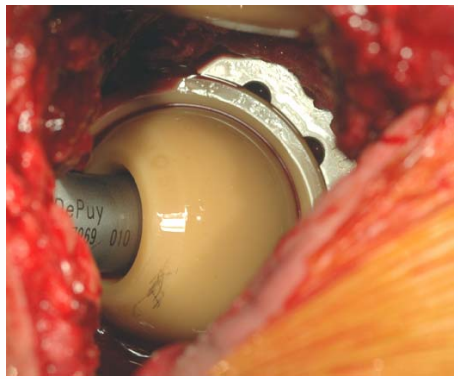
Orthopädisches Zentrum Münsingen

MicroHip

- MicroHip Zugang
  - Step 8
    - Implantation /Reposition







Orthopädisches Zentrum Münsingen

MicroHip

- Animation

Orthopädisches Zentrum Münsingen

MicroHip

- Vorteile:
  - Muskulatur, Sehnen und Nerven werden kaum geschädigt
  - Weniger Blutverlust
  - Weniger Schmerzen
  - Schnellere Erholung
  - „fast“ ein natürliches Gelenk

Orthopädisches Zentrum Münsingen

MicroHip

- Nachteile/ Gefahren:
  - Zu wenig Schmerzen !
  - Nur ein „kleiner Eingriff“

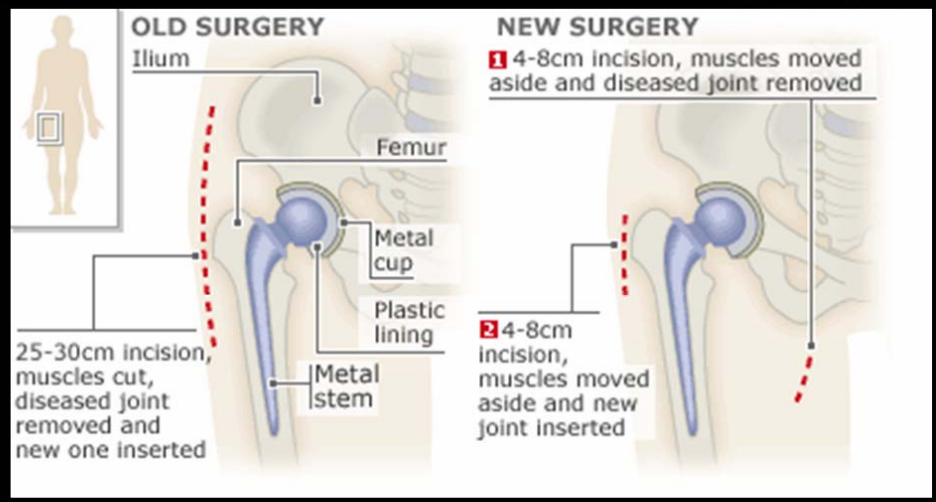
- **Die Biologie, der Körper braucht Zeit**
  - Bis eine Narbe ausgeheilt ist braucht es mindestens 6 Wochen

Orthopädisches Zentrum Münsingen

MicroHip

'Home in a day' hip replacements
Thursday, 2 October, 2003

BBC NEWS



"As soon as more surgeons are trained in the technique it will become much more widely available. In the future this could benefit up to 70-80% patients who need a hip replacement."

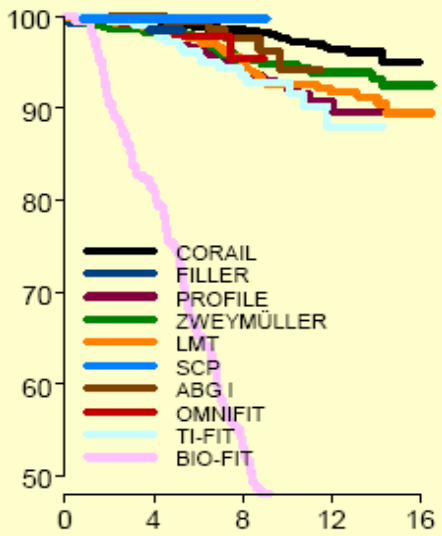
Howard Ware
Consultant Orthopaedic Surgeon
Chase Farm Hospital, UK.

Orthopädisches Zentrum Münsingen

MicroHip

- Wie lange „hält“ mein Gelenk

Stem prostheses, revision of stem



Nasjonalt Register for Leddproteser

The Norwegian Arthroplasty Register
Orthopaedic Department
Haukeland University Hospital
N-5021 BERGEN
NORWAY
http://www.haukeland.no/nrl/

Prospective studies of hip and knee prostheses

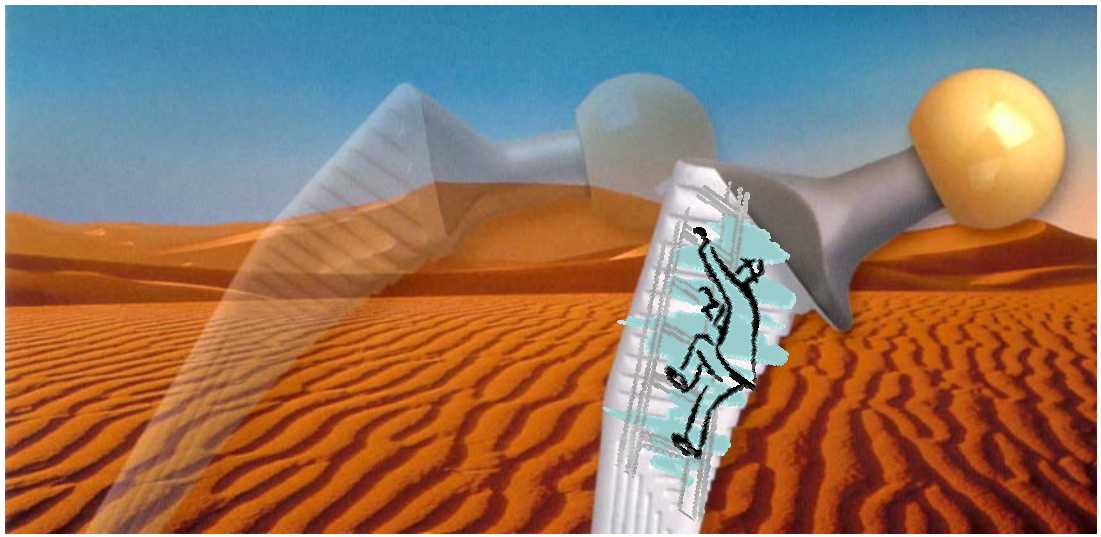
The Norwegian Arthroplasty Register 1987-2004

Stem prostheses	N	R	Median Follow-up in years	Revision % at 10 years	Revision % at 15 years
Corail	5130	83	6.8	2.4(1.8-3.1)	4.9(2.5-7.2)
Filler	956	9	2.3	*	*
Profile	863	60	9.5	7.5(5.5-9.5)	10.3(7.0-13.5)
Zweymüller	512	21	8.3	5.2(2.8-7.7)	7.5(4.2-10.8)
LMT	491	35	12.5	7.6(4.9-10.3)	10.8(6.8-14.7)
SCP	443	1	2.9	*	*
ABG	300	5	5.3	5.8(0.4-11.2)	*
Omnifit	299	5	4.5	*	*
Ti-Fit	212	16	8.7	7.2(3.3-11.0)	*
Bio-Fit	207	141	15.1	55.7(48.6-62.7)	70.9(64.2-77.6)

* Length of follow-up was insufficient.

MicroHip

- Besten Dank



Orthopädisches Zentrum Münsingen