



Arnaud Deltour M.D.
Ftaita Samy M.D.
21/02/2019 Brussels

The challenges ahead

- Changing the Health care environment
- Creation of a global budget for each pathology – Network
- Correlation with « a medecine à la carte »

 additional costs

Currently

To treat a pathology X

- Multiples unnecessary exams
- Multiples medical opinions
- Delaying in the right care
- Delay in the active functional return (job & sport)
- Huge costs in terms of health care and for society

OUR TEAM CREW



M. Vancabeke



Y. Berger



A. Deltour



K. Lagae



J. De Muylder



Definition

- Knee surgeons association with the **same philosophy**
 - Developing a **systematic work** methodology – a **Reference Entity**
 - **To optimize** patient care
-
-

Standardization of care

To Create healthcare pathways

Actors

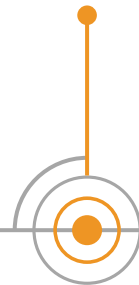


-
- Direction
 - Anesthesiologist
 - Rheuma/ Physical doctors
 - Care units
 - Administrative support

-
- Implants
 - IT
 - Revalidation

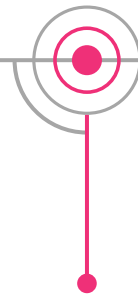


- M. Vancabeke
 - K. Lagae
 - Y. Berger
 - J. De Muylder
 - A. Deltour
-



Delta

You

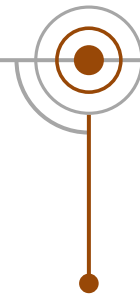


- GP – Sports Doctors
 - Kiné-Podo
 - Manager Trainer
 - Patients - Athlete
-



Pharma

Authority



- Authority Ministry of Health
 - Chirec
-



Knee Pain



GP -SD



**Call Center
Secrétariat**



Emergency

Knee Pain



Trauma



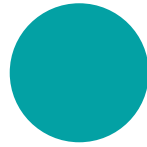
Meniscal trouble



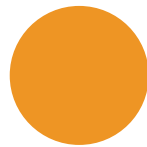
Oncology



Sport injury and overload



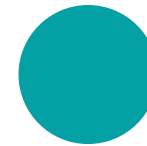
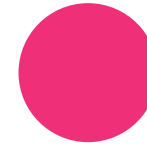
Septic



Anterior knee pain



Instability



Osteoarthritis

Physical doctor

GP- SD- Physio

Rheumatologist

BKC

BRUSSELS KNEE
CENTER

Surgical Pathways

Pre-op

Preadmission

Administration

SURGICAL PATHWAYS: INDICATIONS



RECONSTRUCTION

- ACL / PCL / PLC / MCL / LAL
- MPFL \pm lateral release \pm osteotomy TTA
- Extensor apparatus
- Graft / Plasty



Traumatology

- Reduction
- ORIF



MENISCUS

- Menisectomy
- Suture
- Meniscal graft

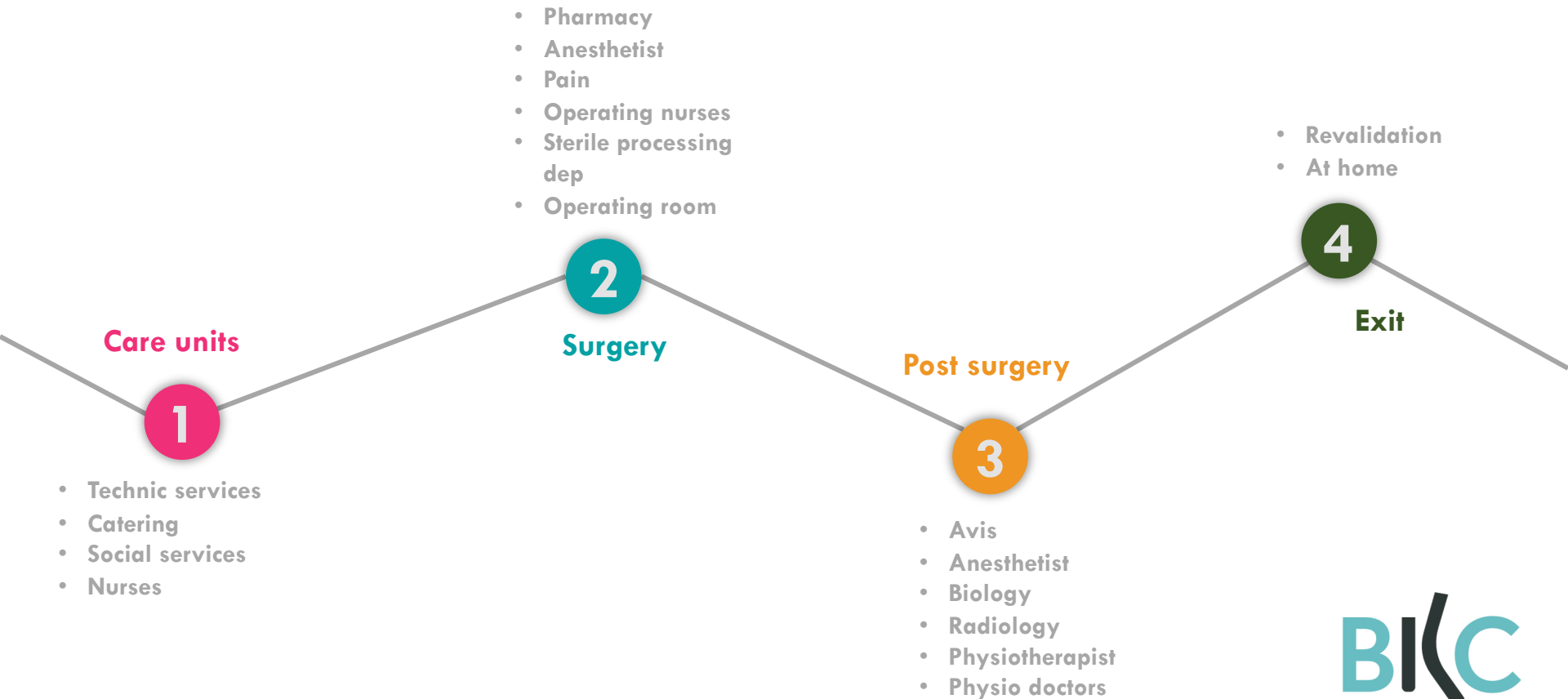


CARTILAGE / DEGENERATIF

- Microfracture ,OAT , MACI
- OTHV/
- Arthrosurface, UNI, PFJ, Bicomp, TKP



Secreteriat / Admission / Hospitalisation



Details

- Management protocol development for each Pathology
- Surgical decision protocol development
- Protocol and data sheets for hospital care
- Pre and post operative physiotherapy protocol
- Follow-up protocol
- Informative Folders

Benefits of Systematization

- Decrease in errors
- Increase efficiency
- Improve Quality of care
- Minimization of costs for Healthcare system and Hospital

« NO STANDARDIZATION WITHOUT COMMUNICATION »

Development of a website: www.bkc.be

W E B S I T E



[Gmail](#) [Images](#)  [Connexion](#)



Recherche Google

J'ai de la chance

Google disponible en : [Nederlands](#) [Deutsch](#) [English](#)

PERFORMANCE



Team assets

- **Hyperspecialized** - experienced team
 1. Theoretically
 2. Clinically
 3. Technically
- Mastery of **new and minimally** invasive surgical techniques
- Influenced by the **Guidelines** of the literature
- Using the **best implant** to treat the defined pathology

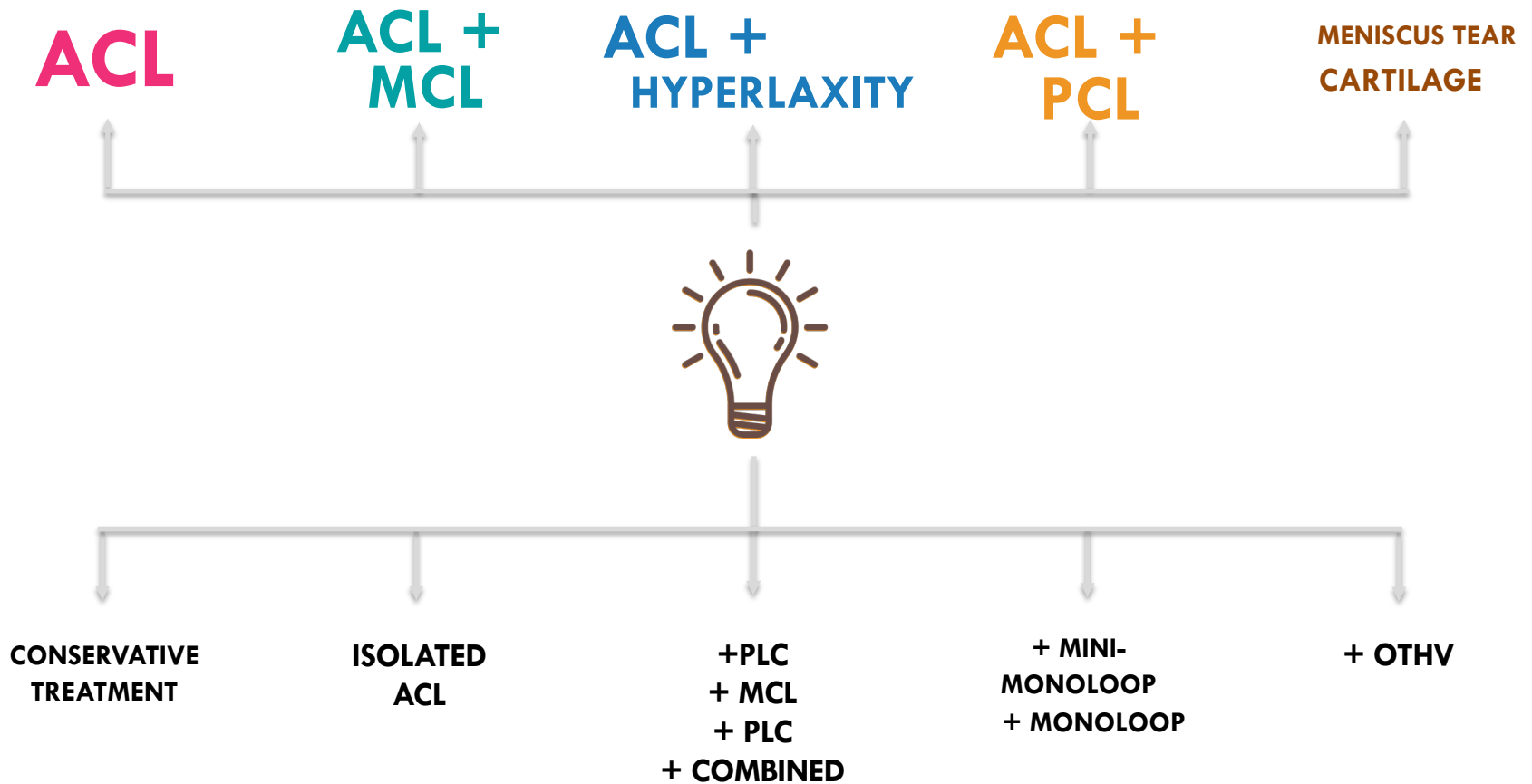
« Tailored Treatment »

« It is the treatment that adapts to
the pathology and not the
opposite »

« Not all the ACL injuries are an isolated rupture of the ACL »



ANTERIOR CRUCIATE LIGAMENT



Etiologies of recurrence: **6%** multifactorial

- Technical errors (70%)
- Biological failure
- New traumatic injury (25%):

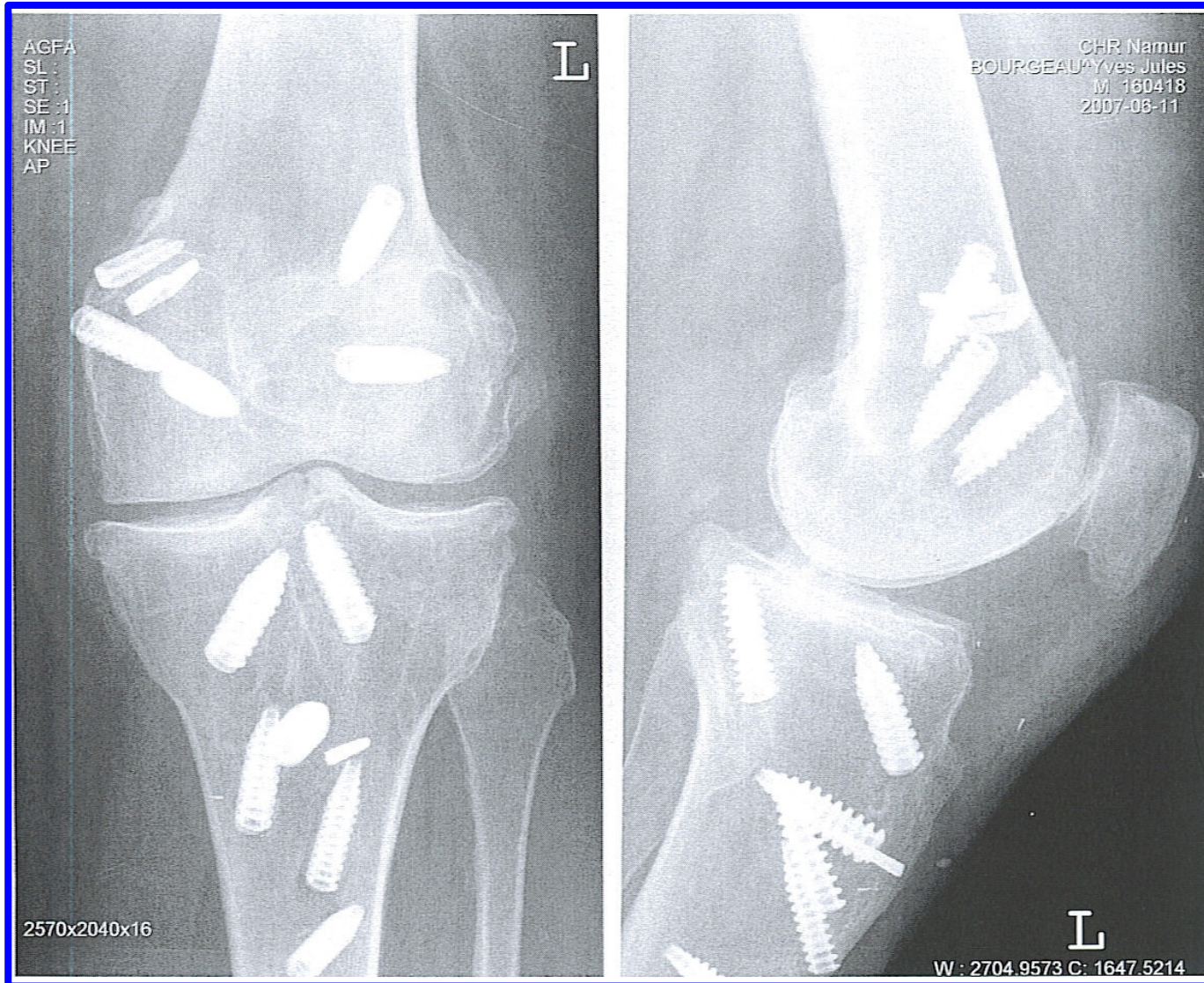
Spindler et al
Am J Sports Med 2015

Di Benedetto et al
Knee Surg Relat Res 2016 Dec

Technical errors

1. Femoral >> Tibial tunnels malposition
1. Unsatisfactory graft fixation
1. Undiagnosed or untreated ligament instability
1. Uncorrected lower limb malalignment (tibial post slope or valgus or varus knee)

« One shot Good shot »



Patella Instability



One luxation

**Luxation +
cartilage defect**

**Chronic
instability**



**CONSERVATIVE
TREATMENT**

MPFL plasty

**MPFL plasty +
Lateral release**

**MPFL plasty +
TTA osteotomy**

MPFL + Insall

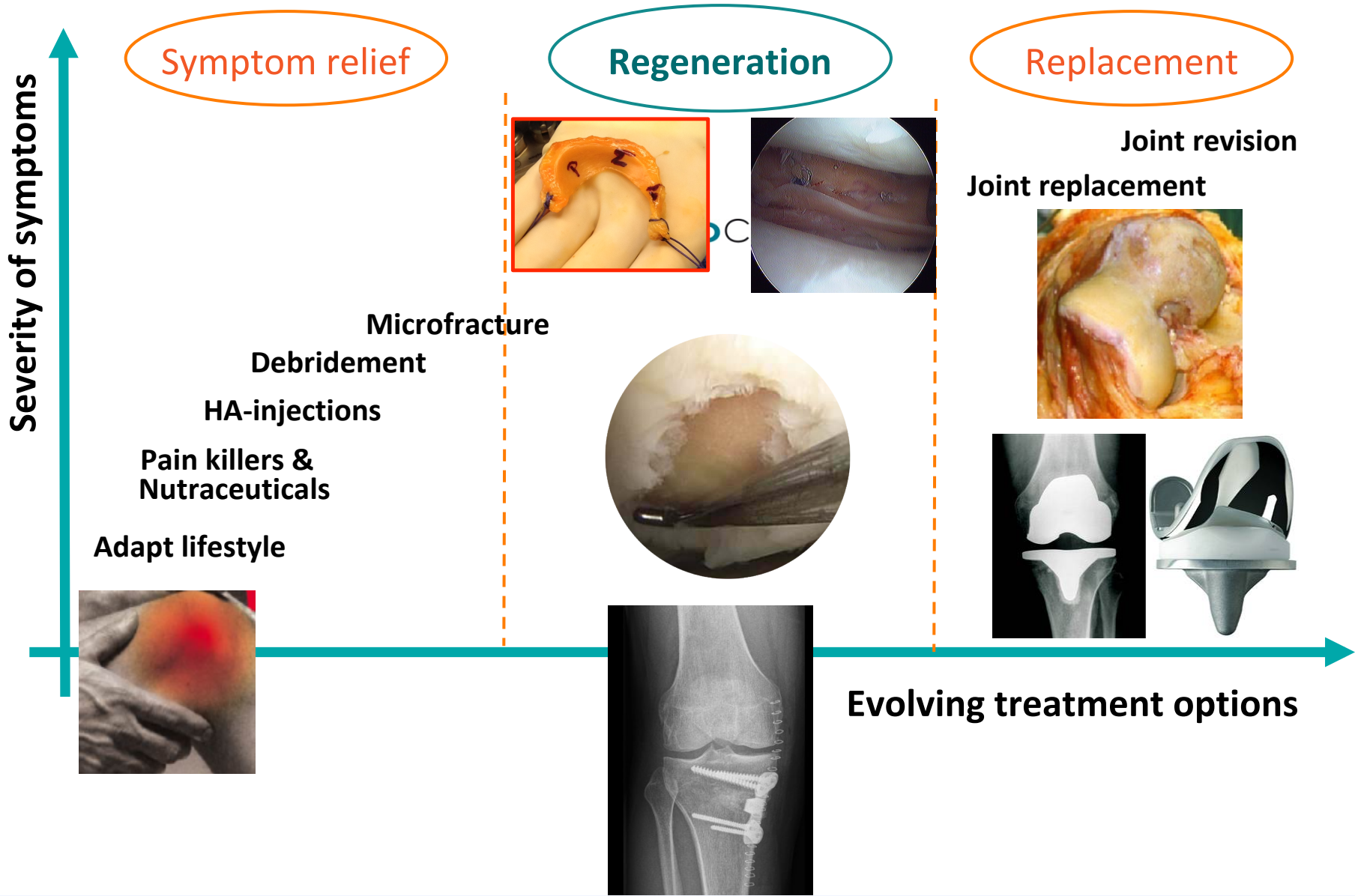
**MPFL +
Osteotomy**

+ cartilage fixation

+ cartilage graft

Osteoarthritis management

Treatment







Using latest generation implant



peroperative 3D Printing
navigation-robots
more acute surgery
More reproducibility
less human errors

Robots



BLUE BELT
RESHAPING MOBILITY

Mini invasive procedure: Sub-/midvastus approach



Anesthesiologist protocol

Intraarticular Knee Block:

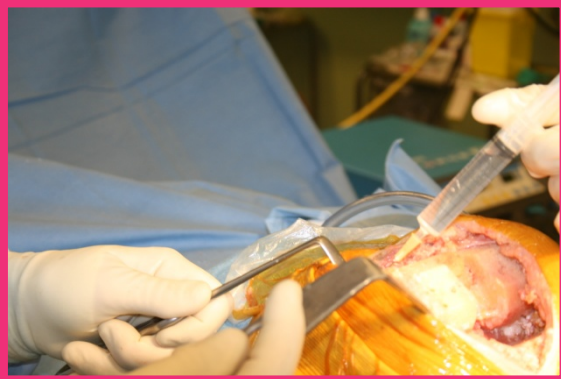
Ropivacaine (Naropin) 200mg

Clonidine (Catapressan) 0,15mg

Epinephrine (Adrénaline) 0,5mg



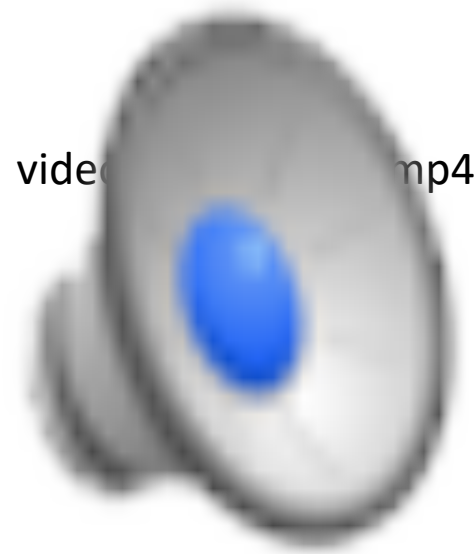
Adductor block



Goals

- Better **quality**
- Less risk of **complications** and **failure**
- A rapid and functional **recovery**
- Better index of patient **satisfaction**

Quick and functional recovery



Quality

Quality

- Standardization
- Performance
- Logistic support : Delta
- Quality assessment

Delta: New generation Hospital

Importance of a Objective Quality



500 reconstructions/year
400 replacements/year

Data base : preop and postop data
Subjective and Objective data

Support IT



Support IT

Data collection by : Lynxcare

MoveUP

IT – Move UP

moveUP is a digital solution specialised in orthopaedics

24/7 monitoring on clinical & functional progress of patients

Automated collection of pre & post PROMs

Possibility to immediately interact when problem occurs



IT – Move UP

moveUP provides insights *and* control,
enabling lower variability and better outcome

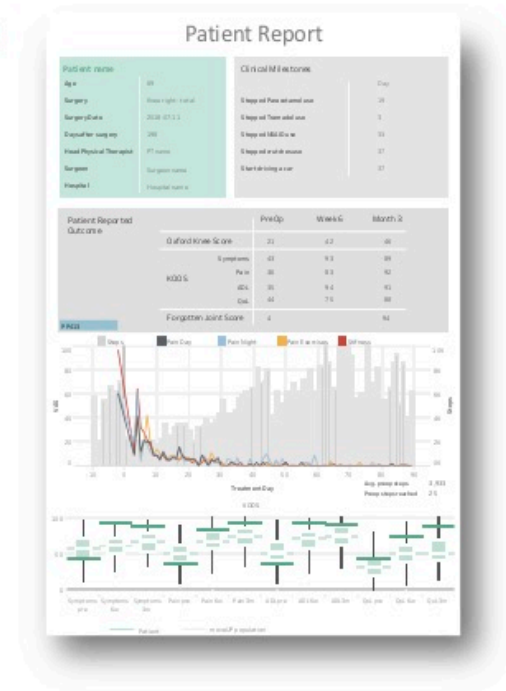
moveUP

Insights & control

- ✓ Prevention of under/overtraining
- ✓ Wounds, hematoma, medication are checked
- ✓ ROM evolution per phase is monitored

High patient engagement

- ✓ Patient satisfaction of 92%
- ✓ Adherence of 85%
- ✓ Net promotor score of 70%



Significant reductions in

- ✓ Readmission rate
- ✓ Unplanned consultations
- ✓ Chronic post surgical pain



Validated by Belgian government

Advantages

- Objective questioning of our work
- Modify the protocols to be more efficient
- Pro and retrospective studies

Formation

- Congres
- Cadaver course
- Fellow-ship



Conclusion



- a new **Concept**
- **Reference Center**
- **HealthCare pathways**
- High level **Tailored treatment**
- Continue evaluation of the quality



Thank you