The CONCEPT of AMBULATORY SURGERY: is it a renewing evolution?

Dr. Luc VAN OUTRYVE
General surgeon, Gent, BELGIUM
Honorary Treasurer I.A.A.S.
The Concept of Ambulatory Surgery: is it a renewing evolution?

- **AMBULATORY SURGERY** means:
  Performing surgery without overnight stay

- that is what we all agree about
- that is what we all support
- that is the idea we are trying to get worldwide spread

Where does this idea come from?
What was before James Nicoll?
What is after James Nicoll?
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EGYPT

IMOTHEP

• First known physician
• Medical professor
• Prodigious writer of medical books
• Author of the Edwin Smith papyrus
  • 90 anatomical terms
  • 48 injuries described

All this: 2,200 years before Hippocrates was born
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The Edwin Smith Papyrus documents ancient Egyptian medicine, including the diagnosis and treatment of injuries.
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Egyptian doctors:

- Good in treatment of bone fractures
- Using splints and bandages
- Surgery was common practice as treatment for physical injuries
- Prosthetics (toes, eyebals) were used
- Decorative purpose
- In preparation for burial missing body parts replaced
- Useful before death?
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Egyptian doctors:

- Using a scalpel for debriding a wound
- See Gardiner: “sculptured relief “
- Knowledge of human antomy
- Mummifiers used a long hooked implement
- Removing of the brain through a nostril
- This means NOTES

All this surgery must have been AMBULATORY
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Ancient Egyptian medical instruments depicted in a Ptolemaic period inscription on the Temple of Kom Ombo.
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Greek and Roman doctors:

- Oldest medical school in Cnidus, Greece (teaching)
- 700 BC
- Aesclaepius, God of Medicine
- in Epidaurus, where Aescleapius was born, first hospital

- Romans were using pincets and scalpels
- Knew about suturing wounds

All the surgery must have been AMBULATORY.
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ASIA

CHINA
- Surgery accepted and proficient craft
- Stagnation
- Reverence for dead
- Filial piety
- Abhorrence for shedding blood
- Hua Tuo
- Believed in simplicity
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ASIA

INDIA

- Sus HRUTA
- Famous surgeon of ancient Aryan India
- Surgery is first and highest division of healing
- Unsullied in itself
- Perpetual in its application
- A worthy gift of heaven
- Source of fame on earth
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AFRICA

- Similarities to Pharaonic medicine
- Egyptian medical science was from inner Africa
- Central and Western Africa

All this surgery must have been “AMBULATORY”
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MEDIEVAL PERIOD

- Diseases seen as a punishment from God
- Huge rooms in monasteries
- Treatment and/or observation of sick people
- Surgery was done by barbers or so-called surgeons (not doctors)
- Interest in anatomy came only in 16th century

All this surgery must have been “AMBULATORY”
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Caricatural Medieval Medical Practitioners.

Scenes inspired by 15th-Century Dutch painter H. BOSCH.

Photo credit: Madeleine KUIJPER, Kuijper illustraties. Courtesy of Wellcome Images.
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A Pioneer of Day Surgery

J. H. Nicoll (1864–1921)
MB, CM Glas, FRFP&S Glas, Legion of Honour (France)
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1864 – 1921

James H. NICOLL

- Children best nursed at home by their mother
- Prolonged bedrest was not feasible and harmful
- Shift from in- to out-patient is more cost effective
- Reducing waiting lists
- Valuable teaching possible
- Free standing accommodation for mothers and children
- Since 1888: domiciliary nursing service
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PROGRESS since NICOLL

Europe and UK

- **1909** British Medical Journal: Nicoll reports the overall success of 8,988 pediatric cases
- Due to the attitude of the medical establishment: no further progress
- **1948** BMJ: editorial “..any surgeon who allows a patient to leave the hospital within 14 days of an abdominal operation (hernia repair?) would be in a difficult position should complications occur…”
- **1955** Farquharson (Edinburgh) promoted early ambulation
PROGRESS since NICOLL

North America and USA

• Nicoll’s concept was not taken up until 1960’s
• 1962: hospital based AS at the University of California, LA
• 1966 : George Washington University
• 1968 : Providence , Rhode Island
• 1969 : first freestanding , Phoenix, Arizona (Reed and Ford, Surgicenter)
• 1970’s and 1980’s : increasing number of DSU opened
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Jin Zhu Zhang and Long Li
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MORE RECENT PROGRESS

ASIA and CHINA

• **1960**: Prof. Jin-Zhe ZHANG, paediatric surgery, advocated AS because of the lack of surgical beds in Beijing Childrens Medical Hospital, Capital Medical University
• At that time AS failed to develop
• **1980’s**: a few hospitals implementing AS were reported
• **2014**: 105 medical establishments had adopted AS
• **2016**: more than 2000 centers carried out AS
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MORE RECENT PROGRESS

LATIN AMERICA

• Dr. Alejandro RECART, Chile, tells us

• Latin America is a huge continent, many things in common
• Not much information available but AS does not exceed 20%
• Only CLASA (Latin American Association of Societies of Anaesthesiologists) has a dedicated chapter on AS trying to promote AS
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MORE RECENT PROGRESS

AUSTRALIA

• **1980**: Australian Association of Surgeons formalised the initiative to develop high quality DS Facilities: “Introduction and establishment of Day Only Facilities and Services”

• **1989 – 90**: 27.1%

• **1992 – 93**: 35.5 % (Lindsay Roberts)

• **2006**: 55.3 % (Australian Hospital Statistics) (W. Adams)
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LAST TIME EVOLUTIONS and FUTUR CHALLENGES

DAY SURGERY Concept

- Covers the period from

- First contact with GP / the diagnosis/Decision to operation
- Preoperative assessment
- Operation on DAY 0

- to
- Postoperative follow up
- Back to work
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LAST TIME EVOLUTIONS and FUTUR CHALLENGES

NURSING and HOME Care

• Covers the period from
  • First contact with GP / the diagnosis/Decision to operation
  • Preoperative assessment
    • to
  • Postoperative follow up
  • Back to work
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| Diagnosis | Preop. ass. | DAY 0 | Postop. control | Work |

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LAST TIME EVOLUTIONS and FUTUR CHALLENGES

PERIOPERATIVE MEDICINE

• Covers the period from

• First contact with ambulatory center
• Preoperative assessment
  • to

• Postoperative follow up
• Postoperative telephone call
• Postoperative last check up
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LAST TIME EVOLUTIONS and FUTUR CHALLENGES

ANAESTHESIA TECHNIQUES/LOCO-REGIONAL TECHNIQUES

• To be used in the period from

  • (Preoperative assessment)
  • On DAY 0
    • to
  • (Postoperative telephone call)
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LAST TIME EVOLUTIONS and FUTUR CHALLENGES

MINIMAL INVASIVE SURGICAL TECHNIQUES / REMOTE ACCESS SURGERY/ NATURAL ORIFICE TRANSLUMINAL ENDOSCOPIC SURGERY (NOTES)

• To be used in the period from

• On DAY 0

• to

• -------
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LAST TIME EVOLUTIONS and FUTUR CHALLENGES

FAST TRACK SURGERY

- To be used in the period from

  - On DAY 0

    - to

  - Postoperative stay in the unit
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LAST TIME EVOLUTIONS and FUTUR CHALLENGES

ENHANCED RECOVERY AFTER SURGERY (ERAS)

To be used in the period from

• On DAY 0
  • to

• Postoperative stay in the unit
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LAST TIME EVOLUTIONS and FUTUR CHALLENGES

Two more principles are important for the success of our Ambulatory Surgery concept:

• FOCUSED FACTORY

• LOCATION
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**CONCLUSION**

The **Concept of Ambulatory Surgery** is the “shell” were the new evolutions and the future challenges can be put together..

- Fast track surgery
- Enhanced recovery after surgery
- Minimal invasive surgery, remote access and NOTES
- Loco-regional and new anaesthetic techniques
- Perioperative Medicine
- Nursing, home care and GP
- Focused factory
- Location

The Concept of Ambulatory Surgery is an organisational concept....
CONCLUSION

The Concept of Ambulatory Surgery is not new, the concept of performing surgery without overnight stay is not new.

But bringing together all the new evolutions and organising them, is new and is the basic idea of James Nicoll.

Does it bring us something new?
NO......fast track surgery, ERAS, focused factory....are new

Is it renewing?
YES....putting them together, organising them, is new and is the renewing action or evolution of the Concept of Ambulatory Surgery.
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THANK YOU FOR YOUR ATTENTION