

# Nicoll Lecture

May 8th, 2017, Beijing, CHINA

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

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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**



## The Concept of Ambulatory Surgery : is it a renewing evolution?



The [Edwin Smith Papyrus](#) documents ancient Egyptian medicine, including the diagnosis and treatment of injuries.

## The Concept of Ambulatory Surgery : is it a renewing evolution?

### Egyptian doctors :

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



## The Concept of Ambulatory Surgery : is it a renewing evolution?



*Dollinger, André (December 2002). ["Ancient Egyptian Medicine"](#). An introduction to the history and culture of Pharaonic Egypt. Kibbutz Reshafim.*



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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**



## The Concept of Ambulatory Surgery : is it a renewing evolution?



Ancient Egyptian medical instruments depicted in a [Ptolemaic period](#) inscription on the [Temple of Kom Ombo](#).



## The Concept of Ambulatory Surgery : is it a renewing evolution?

### Greek and Roman doctors :

- Oldest medical school in Cnidus, Greece (teaching)
- 700 BC
- Aescleapius , 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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<http://members.shaw.ca/jiuwan4/HuaTuo.jpg>, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=1250948>



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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.**

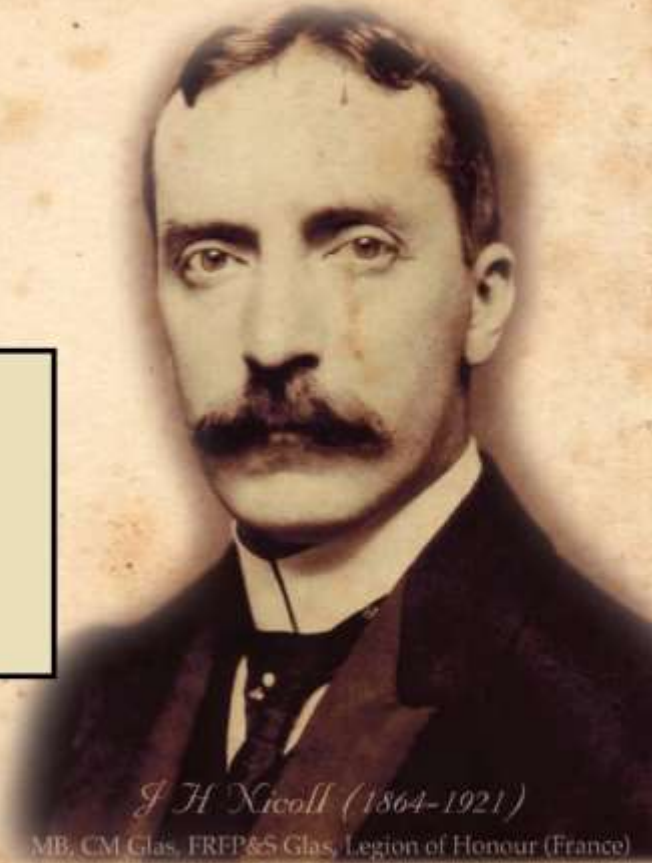
Scenes inspired by 15th-Century Dutch painter H. BOSCH.

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 accomodation for mothers and children
- Since 1888 : domiciliary nursing service



## PROGRESS since NICOLL

### Europe and UK

- **1909** British Medical Journal: Nicoll reports the overall success of 8,988 paediatric 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



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## **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-Zhe Zhang and Long Li

Photo: © 2014 by the author(s)



## 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



## 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)



## The Concept of Ambulatory Surgery : is it a renewing evolution?

Home care+GP					
Periop. Med.					
Anaesth.					
Min. Inv. Surgery					
Fast track					
ERAS					
DS					
	Diagnosis	Preop.ass.	DAY 0	Postop. control	Work

Ambulatory Surgery Concept (L. Van Outryve, Beijing 2017)





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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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## 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 TCHNIQUES/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” where 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 ....**



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## **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**

