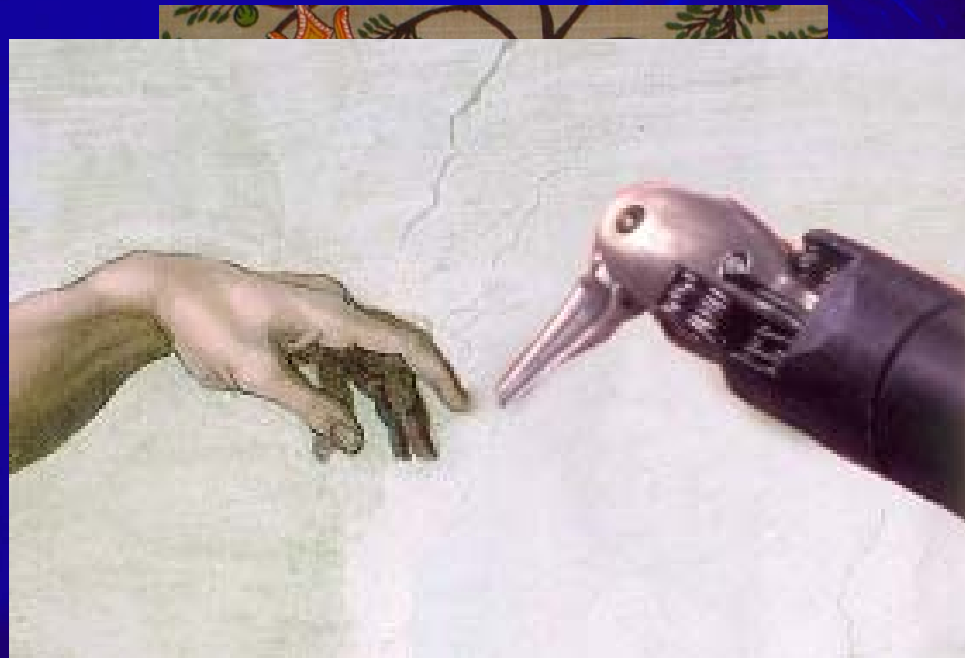


# Vaginal promontofixation by robotic laparoscopy: Da Vinci system<sup>®</sup>



Ch.-H. Rochat  
Geneva

February 9, 2007  
Interlaken

# Urology and mini-invasive surgery :

radical prostatectomy

nephrectomy (partial or total)

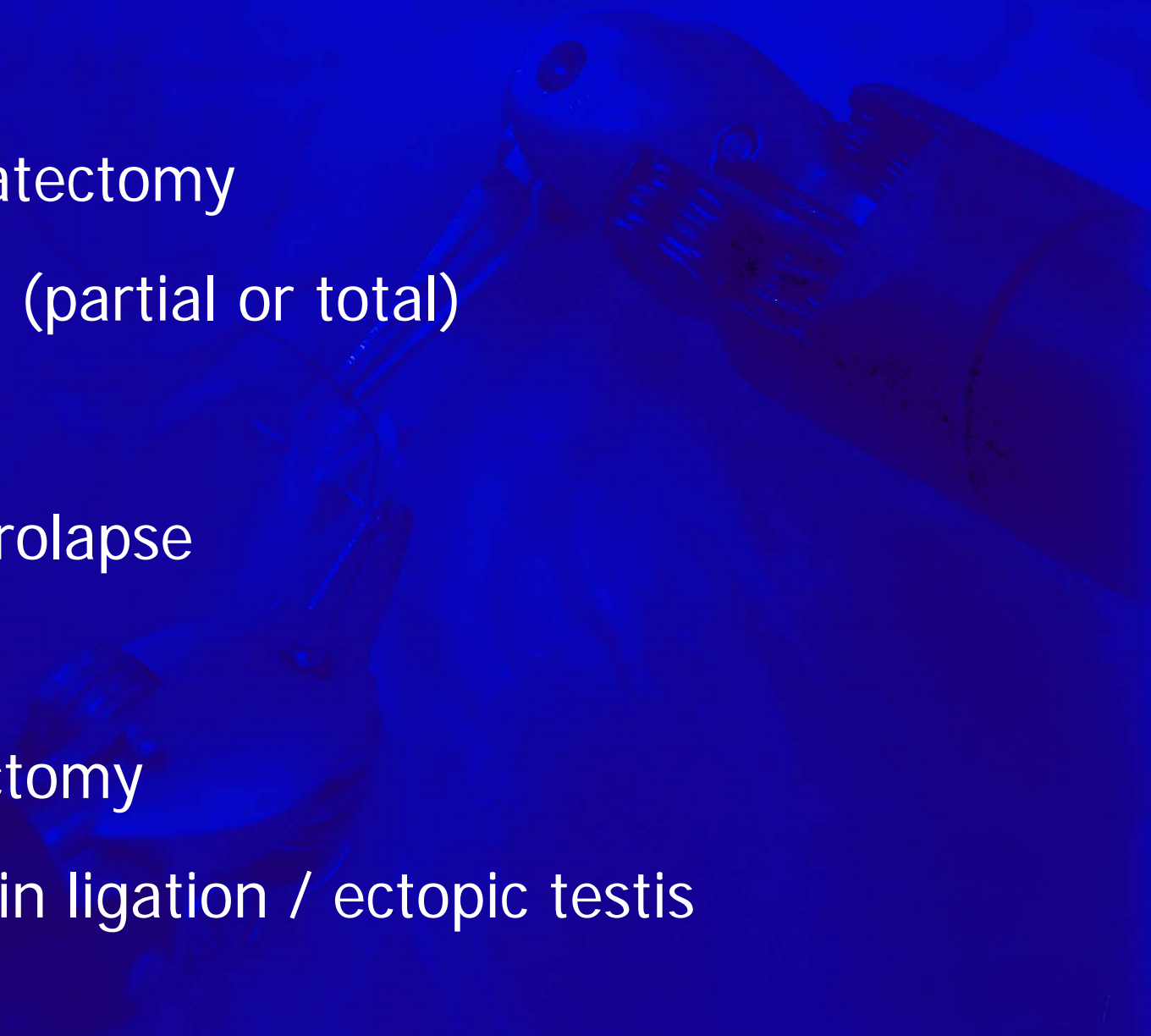
Pyeloplasty

uro-genital prolapse

Cystectomy

lymphadenectomy

Spermatic vein ligation / ectopic testis



# Laparoscopic prostatectomy (LP)



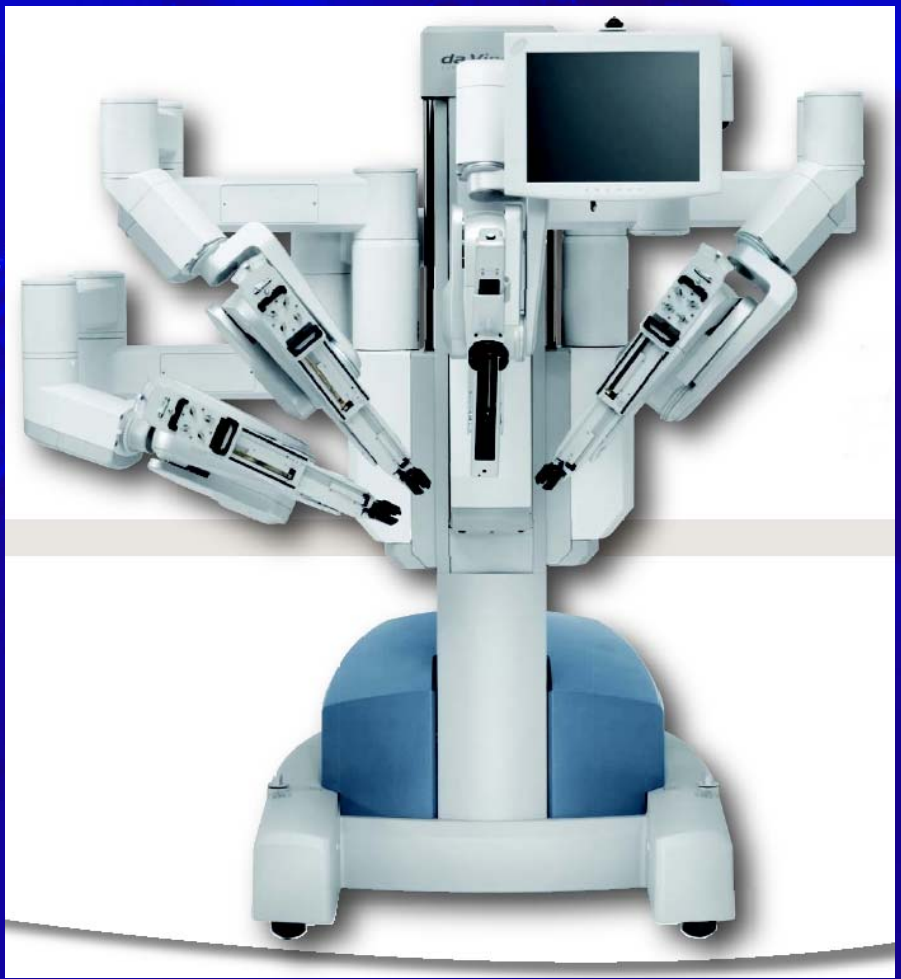
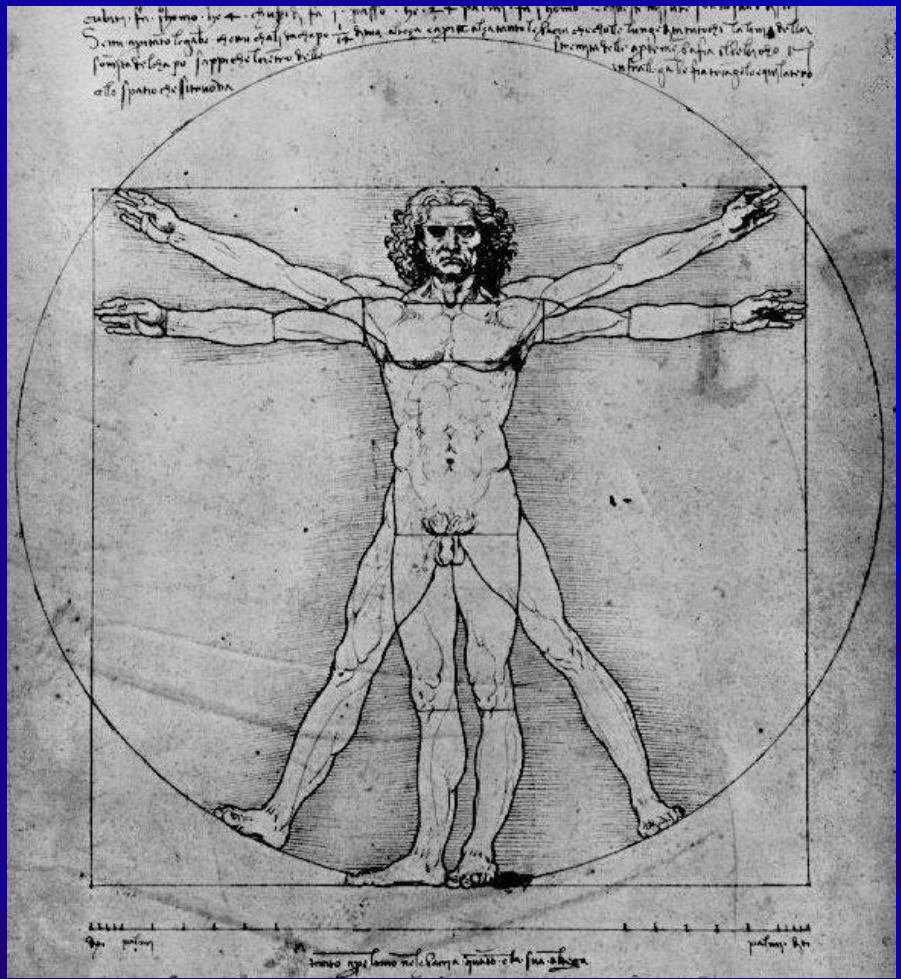
Sept. 1991 First intraperitoneal  
WW. Schuessler, U.S.A

Nov. 1997 European first  
R. Gaston, Bordeaux (followed by CC. Abbou,  
B. Guillonnet and G. Vallencien, Paris)

March 1999 Swiss first  
C.H. Rochat, R. Gaston, Geneva

Dec. 1999 First retrograde extra-peritoneal  
P. Dubernard, Lyon

# The Da Vinci robot®





# 3-D Image

2 cameras

2 sources of cold light

view in the axis of the arms



# Precision

2:1 to 5:1

reduced movements



less shaking

# History of Da Vinci<sup>®</sup> at the Clinique Générale Beaulieu, Geneva



October 2002

Decision to test the Da Vinci robot at the CGB in Geneva

January 2003

11 interventions in 1 week and a broadcast with IRCAD-EITS (R. Gaston, C.-H. Rochat).

March - June 2003

Approval of the project and training of teams.

September 2003

Start of procedures

# Robotic laparoscopic prostatectomies (RLP)



May 2000	J. Binder, Frankfurt
July. 2000	C.C. Abbou, Paris
Sept. 2000	G. Vallencien, Paris
Nov. 2001	M. Menon, Detroit
Aug. 2002	H. John, Zürich
Jan. 2003	C.-H. Rochat, R. Gaston, Geneva



*Clinique*  
**GENERALE-BEAULIEU**

Number of procedures:

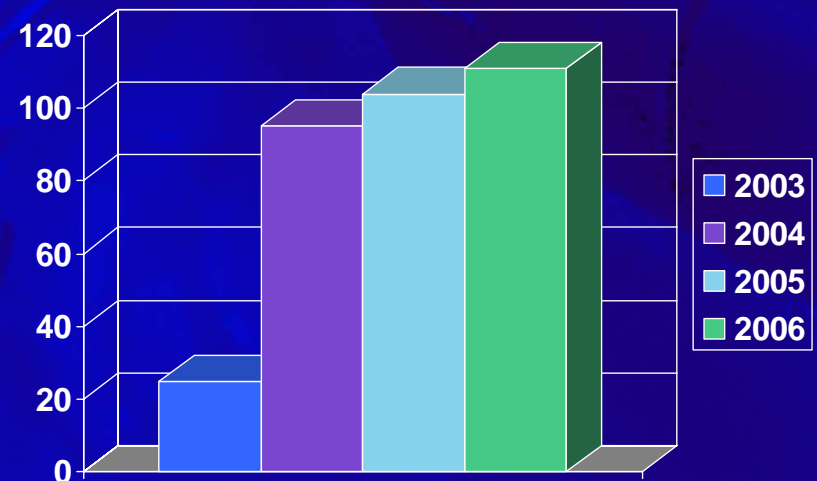
2003 : 25

2004 : 95

2005 : 104

2006 : 111

335 ( 206 radical prostatectomies)



# Robotic better than conventional laparoscopy

3D vision

robotic instruments with 6 degrees of freedom

easy suture :



radical prostatectomy

pyeoplasty

ureteral reimplantation

promontofixation

# Vaginal promontofixation by robotic laparoscopy

## Indications

symptomatic cystocele with  
rectocele

hysterocele

vaginal vault prolapse and  
enterocele

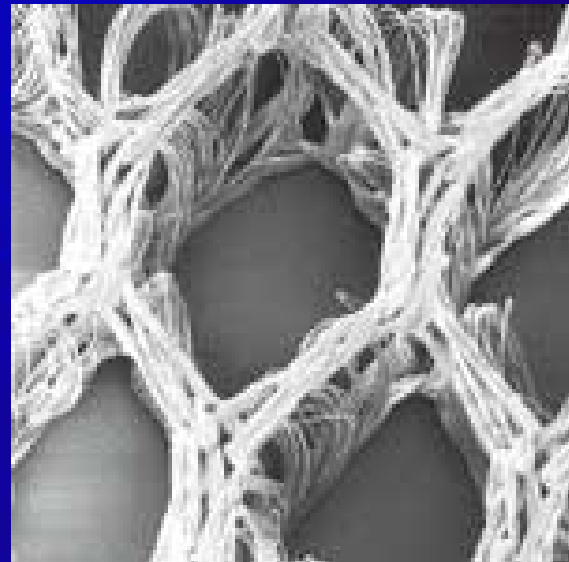
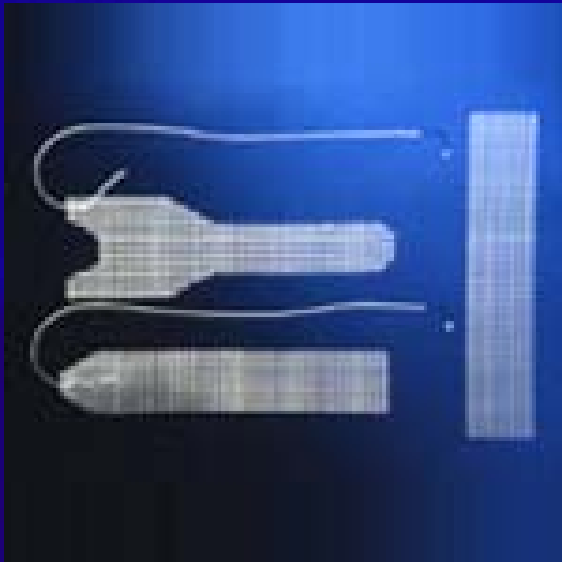


# Vaginal promontofixation by robotic laparoscopy

## Advantages

excellent view of the anterior and posterior compartments

solid cure with mesh prosthesis



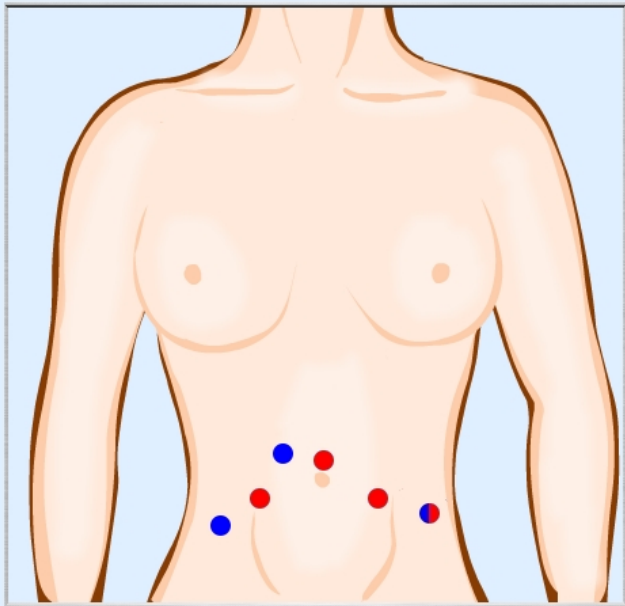


# Vaginal promontofixation by robotic laparoscopy

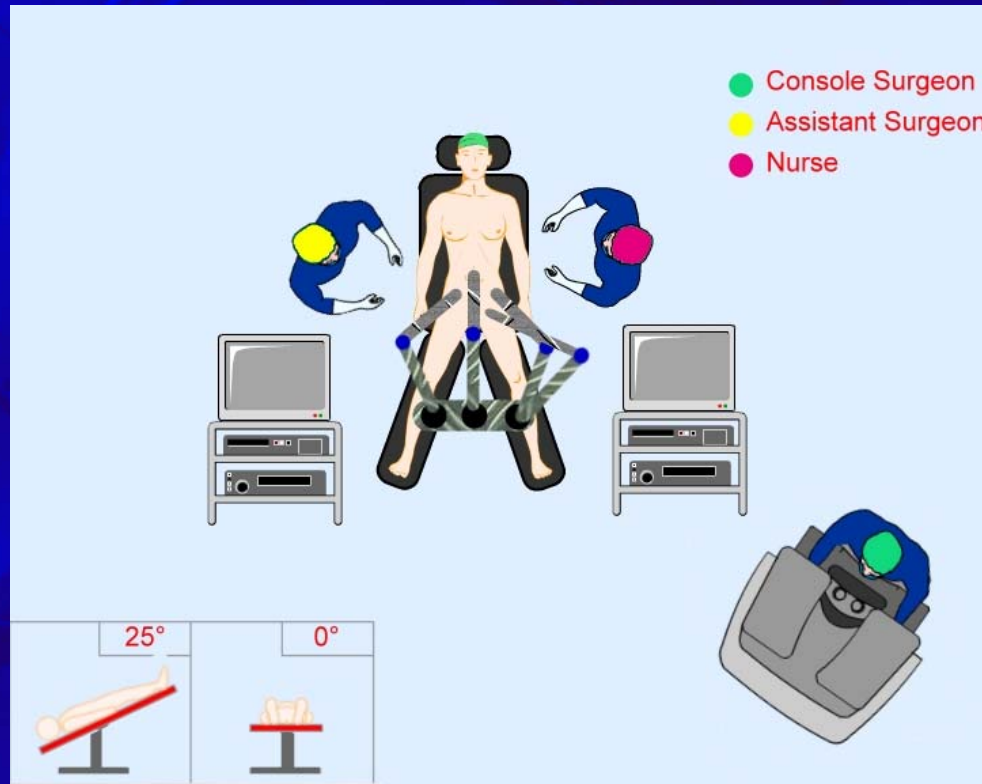
## Installation

Trocars' position

- Robot
- Assistant



- Console Surgeon
- Assistant Surgeon
- Nurse

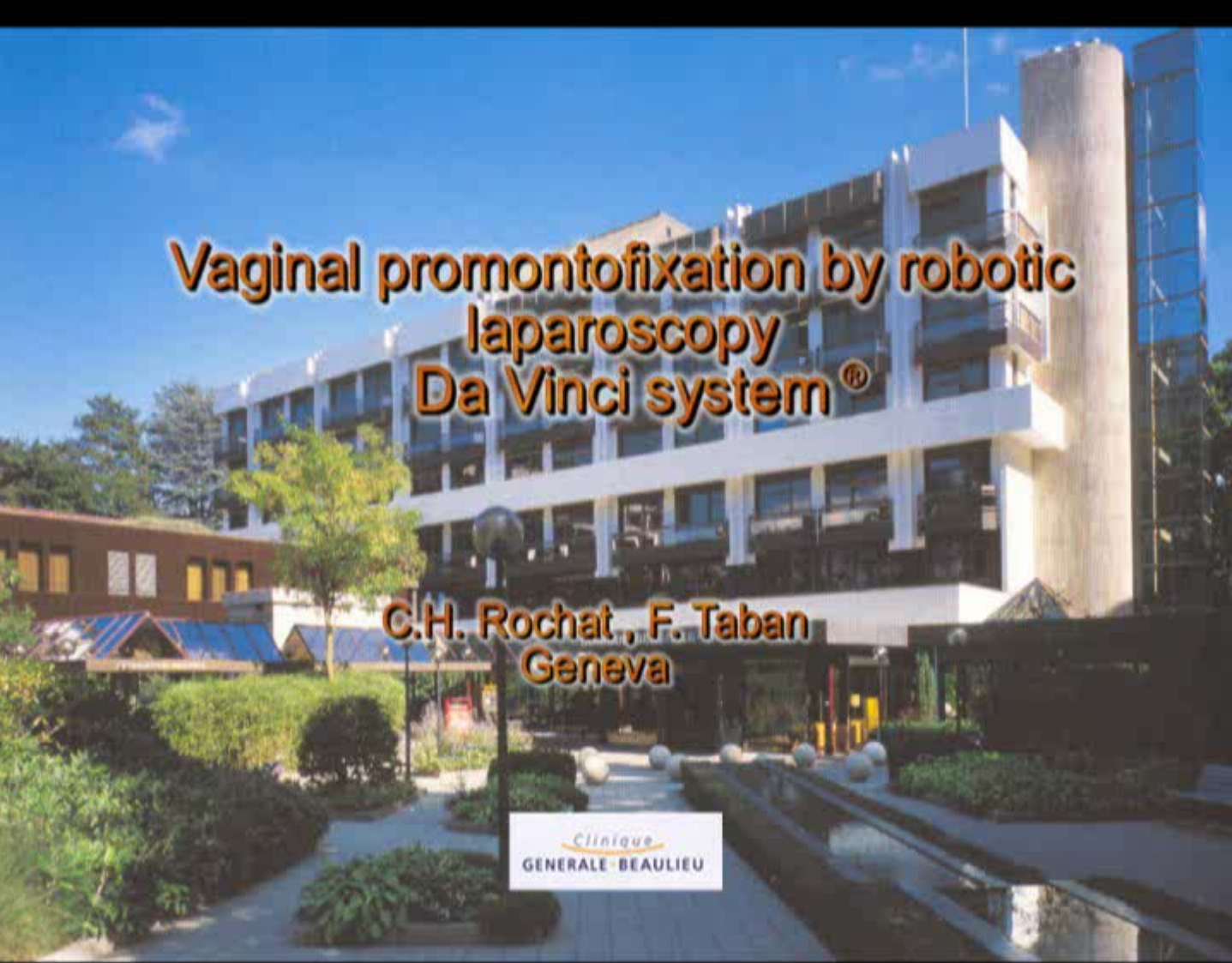


# Vaginal promontofixation by robotic laparoscopy

## Installation



Durée : 30 sec



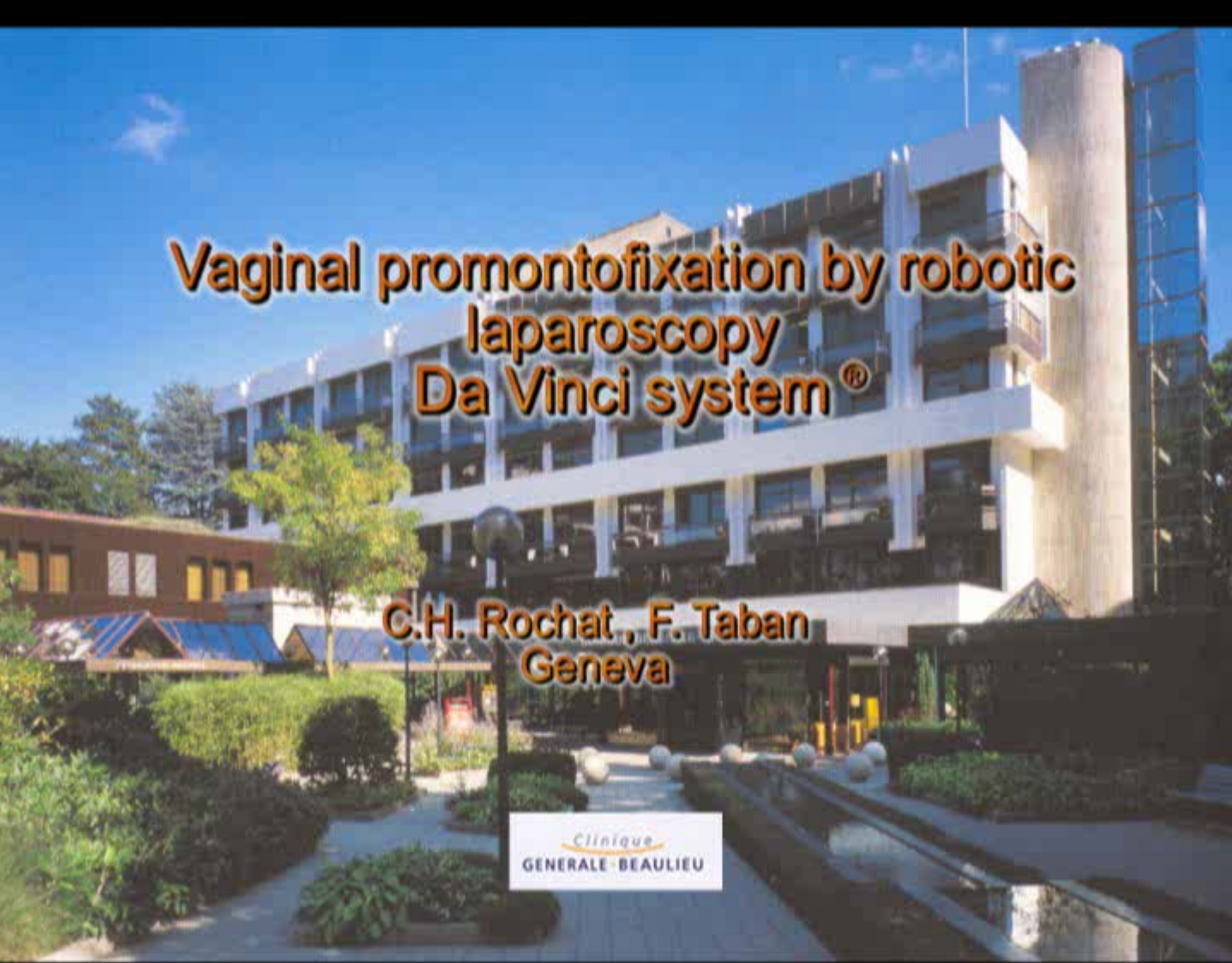
**Vaginal promontofixation by robotic  
laparoscopy  
Da Vinci system®**

**C.H. RoCHAT, F. Taban  
Geneva**

*Clinique*  
**GENERALE - BEAULIEU**

Durée : 3min 10 sec





**Vaginal promontofixation by robotic  
laparoscopy  
Da Vinci system®**

**C.H. RoCHAT, F. Taban  
Geneva**

*Clinique*  
**GENERALE - BEAULIEU**

Durée : 5min 53 sec



# Vaginal promontofixation by robotic laparoscopy

## Questions

Stress incontinence



associated laparoscopic  
Burch operation

TOT / TVT

Hysterectomy (total or  
partial)

Increased risk of erosion\*

\* Bensinger, G. and all Am J Obstet Gynecol 2005 , 93 : 2094-8

# Vaginal promontofixation by robotic laparoscopy

## Conclusions

3-D vision

Easy access to the pelvis

Ergonomic position

Precision of movements

Excellent anatomical and functional results

Advantages of mini-invasive surgery





*The four-armed probe follows the commands of a surgeon seated in a hooded console a few feet away, shades of the wizard at the court of Oz*

**REMOTE CONTROL**

The doctor-directed da Vinci Surgical System performs operations with less cutting and greater accuracy than conventional surgery. Giorgio Armani dress. Balenciaga shoes. In this story, hair, Julien d'Ys using Mokuiba ribbon; makeup, Stéphane Marais; set design, Mary Howard Studio. Shot in a state-of-the-art operating room at the Hackensack University Medical Center, New Jersey. Details, see In This Issue.