V.I.P. - VESCICA ILEALE PADOVANA: A SUCCESSFUL SURGICAL PROCEDURE

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CONTINENT URINARY DIVERSIONS

THE IDEAL CHARACTERISTICS .1

- ADEGUATE CONTINENCE (at rest and under stress)
- EASY, FULL EMPTYING “PER URETHRAM”
- ADEGUATE CAPACITY
- LOW PRESSURES DURING THE FILLING PHASE
- PRESERVATION OF THE INTESTINAL FUNCTION
- PRESERVATION OF THE RENAL FUNCTION ➔ NO REFLUX
CONTINENT URINARY DIVERIONS

THE IDEAL CHARACTERISTICS .2

- ACCEPTABLE SHORT/LONG-TERM COMPLICATIONS
- DURABLE RESULTS
- PATIENT ACCEPTANCE
- EASY AND QUICK SURGICAL PROCEDURE
- NO INTERFERENCES WITH THE NATURAL HISTORY OF THE DISEASE
ORTHOTOPIC URINARY DIVERSION

FROM THE THEORY TO THE PRACTICE

• PRESERVATION OF RENAL FUNCTION

ANTIREFLUXING URETERAL ANASTOMOSIS + DETUBULARIZATION and RECONFIGURATION
ORTHOTOPIC URINARY DIVERSION

FROM THE THEORY TO THE PRACTICE

• PRESERVATION OF THE INTESTINAL FUNCTION

THE SHORTER INTESTINAL SEGMENT PRESERVES THE INTESTINAL TRANSIT TIME

PRESERVATION OF ILEO-CECAL VALVE
V.I.P. - VESCICA ILEALE PADOVANA

THE INITIAL PLAN

- DISTAL ILEUM
- SHORTER LENGTH OF THE INTESTINAL SEGMENT
- DETUBULARIZATION and RECONFIGURATION
- POUCH LOCATED INTO THE PELVIS
- QUICK and EASY PROCEDURE
- ANTIREFLUXING URETERAL ANASTOMOSIS
VIP BRINGS TOGETHER

- THE PRINCIPLE OF DOUBLE FOLDING
- CONCEPTS BY CLAM AND CAMEY
- SOME ORIGINAL SOLUTIONS:
  - LOWER FUNNEL
  - GEOMETRICAL RECONFIGURATION
  - NO SPECULARITY BETWEEN LOOPS
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THE INITIAL VIP

• DISTAL ILEUM
• 50-60 cm LENGTH SEGMENT
• DETUBULARIZATION and RECONFIGURATION
• LE DUC URETEROINTESTINAL ANASTOMOSIS
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FIRST IMPROVEMENTS

- DISTAL ILEUM
- 40 cm LENGTH SEGMENT
- DETUBULARIZATION AND RECONFIGURATION
- LE DUC URETEROINTESTINAL ANASTOMOSIS
- INFERIOR FUNNEL
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THE VIP, STEP by STEP

1. DETUBULARIZATION
2. INFERIOR FUNNEL
3. POSTERIOR RECONFIGURATION
4. URETEROINTESTINAL ANASTOMOSIS
5. ANTERIOR RECONFIGURATION
6. URETHRO-INTESTINAL ANASTOMOSIS
V.I.P. VESCICA ILEALE PADOVANA

DETUBULARIZATION
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FUNNELLING
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1rst + 2nd FOLDINGS
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URETERO-ILEAL ANASTOMOSIS (Le Duc)
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3rd FOLDING
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VIP FITS IN THE PELVIS
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ESTABLISHED SURGICAL FEATURES

- QUICK AND SIMPLE PROCEDURE (40 min > BRICKER)
- SHORT LEARNING CURVE
- TENSION-FREE URETERO-INTESTINAL ANASTOMOSIS
- TENSION-FREE URETHRO-INTESTINAL ANASTOMOSIS
- PROCEDURE MAINLY "EX SITU"
- RUNNING SUTURES
V.I.P. - VESCICA ILEALE PADOVANA

THE POST-OPERATIVE PERIOD

- PARENTERAL NUTRITION UP TO 4th P.D.
- EARLY MOBILIZATION OF THE PATIENT
- POUCH WASHING 3 TIMES / DAY
- REMOVAL OF URETERAL STENTS ON 8 - 9th P.D.
- POUCH-GRAPHY ON 12th P.D.
- PATIENT DISCHARGE ON 13 - 14th P.D.
V.I.P. - LONG TERM RESULTS (107 pts)

METABOLIC DISORDERS

• NO CLINICALLY RELEVANT

• NO NEED FOR VITAMIN B12 or BICARBONATE SUPPLEMENTATION
## COMPLICATIONS

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<tr>
<th>Condition</th>
<th>No. Pts</th>
<th>%</th>
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<tr>
<td>STENOSIS OF URETERO-ILEAL ANASTOMOSIS</td>
<td>11</td>
<td>10</td>
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<tr>
<td>STENOSIS OF ILEAL-URETHRAL ANASTOMOSIS</td>
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<td>12</td>
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<tr>
<td>LAPAROCELES</td>
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<td>VIP- URETERAL REFLUX</td>
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</table>
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DILATED UPPER URINARY TRACTS

# 20 (215 pts) URETERS PREOPERATIVELY DILATED

AFTER VIP 5 STENOSES (25 %)

1 REFUX

14 NORMALIZED
V.I.P. - LONG TERM RESULTS (107 pts)

REFLUX

- 5 % (5 U.U.T.)
- UNILATERAL: 5/5 U.U.T.
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THE CRUCIAL POINT:
THE URETEROINTESTINAL ANASTOMOSIS (Le Duc)

5 % REFLUX

12 % STENOSIS
CAUSES OF URETERO-ILEAL STENOSIS

• SURGEON EXPERIENCE ? NO
• TYPE OF PROCEDURE ? YES !
• BOTH ? NO

• LE DUC PROCEDURE 20.4 %
• NESBIT / STUDER PROCEDURE 2.5 %

S.Roth, AUA 96
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THE EVOLUTION

4. URETERO-INTESTINAL ANASTOMOSIS

LE DUC ➔ GHONEIM
V.I.P. VESCICA ILEALE PADOVANA

URETERO-ILEAL ANASTOMOSIS (Ghoneim)

BUILDING THE NEO-TRIGONE UP
V.I.P. VESCICA ILEALE PADOVANA

URETERO-IILEAL ANASTOMOSIS (Ghoneim)

Ureteral hiatus
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RESULTS

- URETEROINTESTINAL ANASTOMOSIS
  ACCORDING TO GHONEIM:

  6% REFLUX
  5% STENOSIS
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<td>Surgery Demolitive</td>
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ONCOLOGICAL INDICATIONS

**UP TO 1996:**

- ORGAN CONFINED DISEASE (CLINICAL T2 - T3a)
- NO NODAL INVOLVEMENT (PATHOLOGICAL N0)
- NO PREOPERATIVE PROSTATE AND BLADDER NECK INVOLVEMENT
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URETHRAL FROZEN SECTION

... IS THE ONLY GUIDELINE FOR SELECTING THE URINARY DIVERSION PROCEDURE...

V.I.P. - VESCICA ILEALE PADOVANA

ONCOLOGICAL INDICATIONS

**SINCE 1996**

- ORGAN CONFINED DISEASE (CLINICAL T2 - T3a)
- NO NODAL INVOLVEMENT
- NO PREOPERATIVE PROSTATE/BLADDER NECK INVOLVEMENT

↓

NEGATIVE FROZEN SECTION OF THE URETHRAL STUMP
THE REASONS OF THE SUCCESS . 1

• RESPECT OF THE PHYSIC and PHYSIOLOGY PRINCIPLES
• SATISFACTORY and DURABLE FUNCTIONAL RESULTS
• SIMPLE, QUICK, EASY-TO-LEARN PROCEDURE
• ACCEPTABLE INTESTINAL and METABOLIC COMPLICATIONS
• ACCEPTABLE SHORT/LONG-TERM COMPLICATIIONS
• NO INTERFERENCES ON THE NATURAL HISTORY OF THE DISEASE
• PATIENT SATISFACTION
THE REASONS OF THE SUCCESS

THE FOLLOW-UP!!

• POSTOPERATIVE TRAINING

• PERIODICAL CLINICO-FUNCTIONAL EVALUATIONS

• CLOSE CONTACT WITH THE PATIENT (DIRECT LINE-VIP NEWS)
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V.I.P.
IN THE FEMALE
V.I.P. VESCICA ILEALE PADOVANA

V.I.P. IN THE FEMALE

HIGHLY SELECTED INDICATIONS !!
- NEGATIVE BLADDER FROZEN SECTION
- VESICAL PEDICLES FREE OF TUMOR
- POSTERIOR WALL FREE OF TUMOR

STILL INVESTIGATIONAL !!!
V.I.P. VESCICA ILEALE PADOVANA

V.I.P. IN THE FEMALE: FEATURES

- URETHRA SPARING
- VAGINA SPARING
- VAGINAL SUSPENSION TO THE SACRUM BY FASCIAL STRIPS
- STANDARDIZED VIP PROCEDURE
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V.I.P. IN THE FEMALE

urethra

vagina
V.I.P. VESCICA ILEALE PADOVANA

V.I.P. IN FEMALE

![Image of surgical procedure and tissue sample]
V.I.P. VESCICA ILEALE PADOVANA

V.I.P. IN THE FEMALE

urethra
vagina
right strip
rectum
left strip
V.I.P. VESCICA ILEALE PADOVANA

V.I.P. IN THE FEMALE

pubis