



# GU Laparoscopy at UBC- An Update on Our Progress

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## Overview

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- Hospital sites
- Operative time requirements
- Equipment requirements
- OR personnel training
- Dry/Animal Lab training at UBC
- Resident training
- Staff urologist training
- Future plans

## Hospital Sites

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- Selection of site based on primary surgeon, availability of peri-operative resources, equipment, +/- complexity of case
  - VGH- all cases (ASA 1-4)
  - UBC – ASA 1-2; select ASA 3
  - SPH- ASA 1-4
  - RGH- ASA 1-4
  - LGH –ASA 1-4

## Hospital Sites

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- MIS Committee for Vancouver Coastal Health Authority
  - Standardization of reusables, disposables across region
  - Development of Endosuites at Select Hospitals
  - Cost control in OR
  - Reduced lengths of stay to justify increased OR costs
- Close cooperation with Hospital (RFP/MGM)- first division to outline MIS plan of action

## Hospital Sites

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- Advantages of VGH
  - OR staff familiar with large open oncology cases
  - laparoscopic and open instruments available
  - Chief resident in Urology as assistant
  - ICU, Gen Surg, Vasc Surg backup present in OR area- higher chance to attempt completion of difficult laparoscopic case without open conversion
  - Full lab resources for blood products

## Hospital Sites

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- Advantages of UBC Site
  - OR staff facile in laparoscopic room set-up, equipment
  - Fast set-up and turn around times
  - Smaller size- OR leadership facilitate changes in technique, instrumentation
- Disadvantages of UBC Site
  - No on-site General surgery, Vasc surgery, ICU resources- transfer to VGH if problems; limited blood product supply
  - Higher chance of open conversion prior to possible complication

## Operative Time Requirements

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- Longer time requirements- need for surgeon to find additional OR time to keep non-lap case wait lists reasonable
- Unpredictable- booking two lap cases in a day not possible at UBC site- closure of OR at 5 pm
- Turn around time for cleansing of reusable instruments
- Availability of harmonic scalpel generator

## Equipment Requirements

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- Basic laparoscopic sets at VGH likely worst in Vancouver Coastal Health Authority
- Poor decision making in past- e.g. 5 mm telescopes not adequate for Urology
- Large disposable utilization by certain Divisions- e.g. Staplers- reduced budgets for other Divisions of Surgery

## Equipment Requirements

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- Efforts of Dr. McLoughlin
  - Set up Foundation for purchase of Laparoscopic reusable and disposable equipment for VGH/UBC
  - Establish new standard for capital funding for OR equipment – no cost sharing with hospital for initial purchase
  - Close cooperation with OR administration- commitment to reusables with reduced utilization of certain disposables (e.g. staplers)

## Equipment Requirements

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- Purchases > \$350,000 in last two years
- Standardization of sets at VGH/UBC
  - Termanian screw ports
  - Storz reusables
  - Telescopes
  - Olympus camera holder
  - Laparoscopic Bulldogs
- Cooperation with Hospital pays off!!
  - 65% of harmonic disposables at VH for Urology

## OR Personnel Training

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- UBC site- previous extensive experience in MIS due to efforts of N. Panton
- OR administration support at each site essential
- One session at VGH and UBC site each on *set up for MIS cases*- ongoing project; additional sessions planned at VGH
- Anaesthesia coordination and equipment check lists
- Storz and Ethicon sessions with nurses
- Ongoing frustrations with SSD- tracking of incompletely assembled sets
- SSD leadership extremely helpful

## Dry Lab Training at UBC

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- CESEI- Dr. Quyami, CESEI Committee
- JNJ (Ethicon)- corporate partner
  - Requirement of curriculum prior to use of facility
  - Urology first division to create curriculum
  - Resources available prior to sessions
    - Laparoscopy 101 CD- Ethicon educational product
    - Campbell's Urology chapter
    - Pelvic trainer- donated to Division of Urology with instruments by Ethicon; sign out sheet
    - Possible attendance at MGM's "house of trainers"





## Dry Lab Training at UBC

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- Dry Lab Sessions
  - Saturday mornings- 3-4 hours attendance
  - Recording of hours of attendance at sessions, after-hours practice on pelvic trainers etc. by Barb Mueller
  - 6-10 persons per session-open to all residents, staff urologists of VCHA, community urologists
  - Two components-Dry Lab I and II



## Dry Lab Training at UBC

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- Dry Lab I
  - Didactic lecture- RFP- basics of laparoscopy
  - Practice on pelvic trainers
    - Camera/video operation
    - Instrumentation
    - Hand-eye coordination
    - Spatial orientation
    - Optimizing visualization
    - Working as team
    - Introduction to intracorporeal suturing

## Dry Lab Training at UBC

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- Dry Lab II
  - Sat AM- 3-4 hours; 6-10 in attendance
  - Builds on skills from Dry Lab I
  - Cannot attend without successful completion of Dry Lab I
  - Practice on pelvic trainers
    - Advanced intracorporeal suturing
    - Extracorporeal suturing
    - Specimen extraction- Zip lok bag

## Animal Lab Training at UBC

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- Animal lab facilities at Jack Bell Research Building
- Plan for two sessions- basic and advanced
- Curriculum developed- final plan dependent on funding resources
- Problems with funding- CESEI absorbing bulk of funding previously used for animal labs
- Push for Divisions to avoid animal labs- entire training through use of pelvic trainers and ? computer-assisted technology

## Wet Lab Training at UBC

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- Porcine model
  - Nephrectomy is easy; not a good surrogate for humans
  - Expensive venture
- Cadaveric
  - Must be fresh or fresh-frozen
  - V. expensive and difficult to obtain
  - Must be reserved for advanced laparoscopic training

## Resident Training in Urologic Laparoscopy

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- Formalization of curriculum completed with Dry Labs I and II in process of completion for academic year
- No animal labs yet due to funding problems
- Lack of access to CESEI a problem for residents to gain skills on pelvic trainer- card access will take 3-6 months despite complaints
- One pelvic trainer to share amongst 15 residents

## Resident Training in Urologic Laparoscopy

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- Ongoing evolution in curriculum- new exercises developed by residents continually added
- No formalized skill testing so far- await standardization of curriculum in Year 2
- Educational research- difficult- UBC program avoidance of MIS has cost us!
- Good news- our Division dominates CESEI/MIS training in Department of Surgery

## Staff Urologist Training at UBC

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- Increasing interest in laparoscopic training by urologists of VCHA and B.C.
- Bulk have attended 2-7 day courses in Canada, U.S., and Europe
- Courses totally inadequate prior to independent booking of case
- Troubling trend of dependence by urologists on skill set of General surgery colleague
- Dangerous trend of attempting laparoscopic GU surgery when urologist unable to suture intracorporeally

## Staff Urologist Training at UBC

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- Urologists need:
  - Dry lab experience
  - Animal lab experience
  - Attendance at laparoscopic surgery at high-volume center- “must learn to see the anatomy”
  - learn dissection at high-volume center
  - Mentoring of cases
- Problem- how many cases is enough- *not all surgeons created equal*

## Staff Urologist Training at UBC

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- *Who's Who* of Laparoscopy at VCHA
  - Independently booking cases- RFP, MGM, JT, Andrew MacNeily, Koroush Afshar
  - Undertaken advanced courses and attended Dry Labs at UBC-Victor Chow, Ken Poon
  - Attended Dry labs at UBC religiously but no formal course completed- Bill Gourlay, Alan So
  - Attended formal course but no dry lab attendance (upcoming attendance planned)- JE Wright
  - Attendance at formal course planned-Mark Nigro

## Community Urologist Training in Laparoscopy

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- John Kinahan, Ian MacAulay, Bruce Piercy
- John Warner
- Saul Goodman
- Greg Harrington
- George Vrabc (Abbotsford)
- Tom Kinahan, Keith Prestage, Mike Carter
- G. Beristain, J. Chartrand
- Cal Andreou
- Ed Paulus
- Peter Skepasts
- Russ Stogryn
- ?Geoff Palmer, C. Jamieson, R. Hampole
- ? Denis Lavoie and Greg Houle

## Future Plans

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- Mentored cases at Richmond General Hospital and Lion's Gate Hospital
- Formation of Laparoscopy Working Group
  - Vancouver Hospital
  - St. Paul's Hospital
  - Lion's Gate Hospital
  - Richmond Hospital
  - BC Children's Hospital
- Laparoscopic Donor nephrectomy