Robotically-assisted cardiac surgery at Vancouver General Hospital

by Dr. Richard Chung-sop Cook, M.D., MSc, FRCSC, Clinical Associate Professor of Surgery with the Department of Cardiovascular Surgery at the University of British Columbia

Robotically-assisted cardiac surgery has been performed at Vancouver General Hospital (VGH) since May of 2009. Since that time, over 150 patients have undergone a robotically-assisted minimally-invasive direct coronary artery bypass (MIDCAB) operation. We are one of only three centres in Canada which are currently doing robotically-assisted cardiac surgery.

There are several advantages of this operation over a standard coronary artery bypass graft (CABG) operation. Firstly, the operation is less invasive because it avoids the need for a sternotomy (the splitting of the breastbone). Instead, three small (1cm) holes are made in the left side of the chest in order to place the two robotic arms, and the robotic binocular telescope. The robot is used to harvest the left internal mammary artery (LIMA) from the back of the chest wall. This artery is used to create the bypass graft to the left anterior descending artery (LAD). Having the LIMA used to bypass a narrowing of the LAD is important because the LIMA has been shown to last longer than any other bypass graft (ie. saphenous vein or radial artery), and also lasts longer than any stents.

The robot is helpful to surgeons because it allows us to operate using small incisions. Also, the binocular telescope provides a magnified three-dimensional view, which enhances accuracy. The robot even has special computers which eliminate any tremors, which is important when operating on small structures, like the LIMA, which is usually less than 2mm in diameter.

After the robot has been used to harvest the LIMA, a 5 to 6 cm incision is made on

the front of the chest, just to the left of the breastbone. This incision allows the surgeon to access the heart by creating a gap between the ribs (ribs are not intentionally cut or broken) through which a hand-sewn connection between the LIMA and the LAD is created. This part of the operation is done without the heart-lung machine, and is called 'beating heart' surgery, because the operation is done without stopping the heart. The advantage of doing a heart operation without the heart-lung machine is that it avoids some potential complications associated with the heart-lung machine.

Although the heart-lung machine allows heart surgeons to perform complex and life-saving surgery on many patients, some patients will unfortunately experience a complication due to the heart-lung machine itself. In patients undergoing a robotically-assisted MIDCAB, it has been our experience at VGH that avoiding the use of the heart-lung machine has been associated with less confusion after the operation in high-risk patients, as well as less bleeding and much lower requirements for blood transfusions.

Because there is no sternotomy, and no need for the heart-lung machine, many patients having a robotically-assisted MID-CAB are able to leave hospital much sooner than after a regular CABG, with some patients being discharged after only three days.

Patients undergoing robotically-assisted MIDCAB are also able to resume normal activities much more quickly, and do not have the same restrictions on lifting or driving that normal post-op CABG patients have.

Fortunately, at VGH, no patients (0%) undergoing robotically-assisted MIDCAB (including patients who were converted to a sternotomy-based operation) have died in the operating room, or in the first 30 days

after the operation. Only one patient has had a stroke (0.7%). Eleven patients (7.2%) have required conversion to a sternotomy. This has been because of a number of different reasons, including unexpected scar tissue



Dr. Richard Chung-sop Cook, M.D., MSc, FRCSC

around the lung, bleeding, difficulty identifying the LAD, and instability of the patient.

Currently at VGH, robotically-assisted cardiac surgery only allows for a single bypass graft, using the LIMA to create a bypass graft to the LAD. Ideal candidates are those patients who have disease involving only the LAD. Other potential candidates are those patients with a narrowing of several coronary arteries, but who are poor candidates for either stenting or regular CABG. However, these types of cases are reviewed on a case-by-case basis.

Currently, we have the ability to do up to two robotically-assisted MIDCAB operations every week at VGH. Candidacy for a robotically-assisted MIDCAB depends on a number of factors, including the angiogram, a cardiac-gated CT scan of the chest, and specific factors related to each specific patient which may make a regular CABG operation riskier than normal. Because each patient is unique, a critical step is the meeting with Dr. Richard Cook, who performs the operations.

Moving forward, we are hoping to be able to use the robot to harvest both the left and the right internal mammary arteries. This would allow for bypass grafting to two coronary arteries. We are also planning a research study to randomize high-risk patients to either regular CABG or robotically-assisted MIDCAB plus stenting.

President's Report

Hello fellow Open Hearters.

It is my honour to have been elected, at the recent Annual General Meeting of the Pacific Open Heart Association, to be your president for the next two years.

The Board and I wish to thank John Chesman for his fine leadership and direction as our president over the last two years. Fortunately for us John will continue to serve on our Board as past president and continue to provide his skills and expertise to the Board.

I would also like to express my, and the POHA's, sincere appreciation to John Sutherland for his outstanding contributions to our association. John resigned from the POHA Board this past February after having served as our Treasurer for over ten years. We'll miss his knowledge and wisdom.

Over the next two years, it will be my goal to continue to move the POHA forward in an ever changing environment. In particular, my focus will be to increase our membership base and, in turn, the number of volunteer visitors, as the two are interrelated. So I'm addressing this message

specifically to the more than 2,500 patients who will be receiving this newsletter from our Volunteer Visitors this year.

Hopefully you will feel like I did when I had my visit ten years ago when I underwent by-pass surgery. I felt that the visits made a huge difference and helped both me and my family in coping with all of the uncertainties and anxieties of an open heart procedure.

As you may know all of our visitors have had an open heart procedure themselves so they can clearly relate with what you will be dealing with before and after your surgery and therefore, can provide you with non-medical advice and support. I urge all of you to consider becoming a POHA member and perhaps also consider becoming a volunteer visitor in the future. We need people such as you if the POHA is to continue to provide the services we offer to both open heart patients and the hospitals in the Greater Vancouver area. Our team captains would love to hear from you if you would like to volunteer, especially if you reside in the Vancouver downtown area and can visit patients at St. Paul's Hospital. The team captain for St. Paul's is Jennifer Rule and she can be reached at 604-739-3111.

Membership fees to join the POHA are still only \$10.00 and can now be paid via PayPal on our web site. The membership fee is used to cover the costs of publishing our biannual *Pacific HeartBeat* newsletter, postage costs and costs related to operating our web site, etc. Any surplus money is donated to the cardiac wards of the hospitals we serve. If you haven't renewed your membership please do so as we would like to keep in touch with you.

Finally, the POHA Board of Directors currently has three vacancies on our Board and we would be interested in hearing from all interested parties, especially if you have an interest in filling the soon to be vacant Treasurer's position. Please contact me at 604-596-3784.

Wishing you a great and heart healthy summer.

Rick Cozzuol

President, Pacific Open Heart Association

Treasurer Vacancy

The POHA Board is seeking to fill the vacant Board position of Treasurer. The duties and responsibilities are as follows:

1. General Financial Oversight

- Ensure appropriate financial systems and controls are in place
- Coordinate reporting to other Board Members as necessary

2. Financial Planning and Budgeting

• Preparation of annual budget to be reviewed with Board

3. Banking and Bookkeeping

- Coordination and oversight of systems to ensure that all receipts and disbursements are accurately collected/paid and recorded and the Bank account is formally "reconciled"
- Supervision and coordination with hired bookkeeper to ensure that quarterly and yearto-date financial reports are prepared in an accurate manner to be presented to the Board

4. Investments

- Assist the Board in making decisions with regards to the investment of POHA surplus funds
- Meeting with the POHA investment advisor as required
- Monitoring investment performance and reporting to Board on a periodic basis

5. Annual Year-end Financial Statements

- Supervision and coordination with the POHA accountants to provide the information necessary for them to prepare the Annual Financial Statements, Charity Tax Return and GST Rebate Return
- Attendance at the POHA accountants office to meet and review their work

6. Donation Receipts

 Supervision and coordination of computer system to ensure that all donations received by the POHA are recorded in an accurate manner and that each donor receives the proper Income Tax Receipt as required by the Canada Revenue Agency

7. Meetings

- Attendance at the regular Quarterly Board meetings (and any others that might be necessary) and delivery of a Financial Report to the Board at each meeting
- Attendance at Annual General Meeting and presenting year-end reports to all Members

8. Insurance

 Coordinate Directors' and Officers' insurance coverage for Board

If you are interested in this position, please contact the President of POHA, Rick Cozzuol at **604-596-3784** or email: **board@pacificopenheart.org**

Donation to Abbotsford Regional Hospital

David Hunter and Peter Langfield are shown with the Device Spot Vital Signs Monitor purchased with funds donated by the POHA to the Abbotsford Regional Hospital Cardiac Care department. This piece of equipment takes vital signs more quickly, easily, and reliably within half the time as other spot-check devices, improving workflow and patient satisfaction.



l to r: David Hunter and Peter Langfield are shown with the Device Spot Vital Signs Monitor



32nd Annual POHA Moe Pitcher Golf Tournament - June 17, 2016

This year 69 golfers (the highest tournament turn out in years) played golf at Poppy Estates Golf Course in Aldergrove. It was a great time renewing old friendships, remembering those who were not with us and making new acquaintances. Our golf committee endeavours to provide an affordable and great experience for every golfer.

This is only possible with the support of our generous sponsors. Their sponsorship allows us to donate excess funds to local hospitals for the benefit of cardiac patients.

Please check the following sponsors and use their businesses if possible.

DMCL Chartered Accountants, National Bank, Hollis Wealth, Rexall Drugs, Austin Metal Fabricators, Home Restaurants, RCH Hospital Foundation, Coast Capital, St. Paul's Hospital Foundation, Milner Fenwick, VGH Health Sciences, Pharmasave, Busters Towing, HUB Insurance, West Coast Golf Group, Big Sky Golf Course and Golden Eagle Golf Course.

The tournament cannot run smoothly without the help of our volunteers. Thanks to Mike Martin, Ken McBain, Pat Hagan, Alfred Buchi, Bill Turpin, Chantal Enns, Dennis Kraft, Amelia Moloci, Ellen Cozzuol and the golf committee Rick Cozzuol, Bob Axford and John Chesman.

John Galbraith won the putting contest (\$135.00) sinking two putts on a very tricky set up.

Amelia Moloci won the early bird draw for a free entry next year.

In a fitting tribute to Moe Pitcher, last year's winners were victorious again this year. At six under par the foursome of JoAnne Pitcher, Margaret Hansen, Jack Steele and Craig Desautels edged out Rolf Gullmes, Gary Hayes and Dave Estergaard for the repeat win. Congratulations to both



l to r: Craig Desautels, Margaret Hansen, JoAnne Pitcher, Jack Steele

teams on a great score.

If you are interested in adding your name to our golfer list please contact me:

Email: rkocheff@telus.net Phone: 604-467-2904

Thanks to all for attending. We look forward to seeing you next year.

Roger Kocheff

Don Topp Trophy 2016

The Don Topp Trophy for 2016 was presented at the Annual General Meeting in April by John Chesman to Alfred Buchi. This award is given each year to a member in recognition of outstanding service to the organization and to Open Heart surgery patients.

Alfred had coronary artery by-pass graft surgery at Vancouver General Hospital in 2001. He became a member of POHA in 2004, and immediately took on the role of an active visitor at VGH and Surrey Memorial Hospitals. He then joined the Board of Directors in 2008.

The year 2010 was a busy one for Alfred. He replaced Marjorie Blair as Team Leader at VGH, and at the AGM in February was elected Vice-President.

At the AGM in February, 2011, Alfred was elected by the Board of Directors to lead the POHA as President, a position he held for the following three years. Up to the present, he continues to be a board member, and to visit patients at both VGH and Surrey Memorial Hospitals. He is still the Team Leader at VGH.

As a result of Alfred's long background with POHA he is recognized by the Board and membership as an extremely valuable asset. He is a strong leader of the visitation program at VGH and his work is appreciated by the volunteer visitors as well as by the cardiac surgery ward staff.

Congratulations Alfred on being chosen as the recipient of the Don Topp Trophy.



l to r: John Chesman presents the Don Topp Trophy for 2016 to Alfred Buchi

Volunteer Visitors at Cardiac Surgery Hospitals

We want to recognize the following Volunteer Visitors who provide valuable support to patients in hospitals.

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Paul Altilia	John Ashbridge	Robert Axford	Maureen Baker	Ed Bradbeer
Alfred Buchi	Charlens Challmie	Gene Chiang	Rick Cozzuol	Jim Cross
Karen Dalgety	Robert Davies	Ed Dezura	William Fedechko	Gerald Green
Rolf Gullmes	Patrick Hagan	Dave Harris	Marc Haslem	Nils Hognestad
Rose Holbrook	David Hunter	Roger Kocheff	Peter Langfield	Paul Lau
Richard Lemire	Albert Loewen	Thomas Lundgren	Dick Mackenzie	Kathy McAuliffe
Mike Martin	Bob McDowell	Gord McIvor	Bernie McNeil	Joe Minten
Sadru Mitha	Jerry Moloci	Len Mueller	Fiona Odam	Mac Parlee
Roger Phillips	Vaughn Raeside	Jennifer Rule	Fred Sato	Art Simmons
John Shinnick	Bill Speers	Brian Symonds	Tom Taylor	Terry Vickers
Frank Winters	Hans Wong	Bruce Wood		

New Member of POHA Board of Directors

We are pleased to inform you that in January 2016 Amelia Moloci joined the Board of Directors as our Secretary. Amelia, although she is not an open hearter, is married to Jerry Molocei, who is a long time volunteer visitor at Royal Columbian Hospital. Amelia was a long term employee of a major Lower Mainland credit union and has

served on the Boards of several other non-profit organizations. We're very pleased that she has decided to bring her expertise to the POHA Board.



Amelia Moloci

2016 POHA Annual General Meeting

The Annual POHA General Meeting was held April 9, 2016 at the Unitarian Church in Vancouver. There were 27 members in attendance.

The meeting opened with the reading and accepting of the 2015 minutes. Reports from the various committees – Treasurer, Golf, Pillows, Visitor Program – were presented and accepted.

President John Chesman announced that John Sutherland has resigned his position after serving 15 years. John Chesman thanked him for his contributions and also thanked were Barb Smith and Sharon McGovern for their contributions.

All current board members agreed to stand for an additional term. There were no nominations from the floor.

Alfred Buchi was presented with the Don Topp Memorial Trophy for his invaluable service to POHA.

Meeting adjourned at 1:57 pm.

Guest speakers were Gavin Arthur of the Heart and Stroke Foundation and Taylor Teague of Hollis Wealth. Refreshments were then served.

Board members met briefly afterward to fill positions for upcoming term.

New format for Newsletter

As you may have noticed, the format of this newsletter has changed from previous issues.

We hope you like it. If you would like to send us any comments or suggestions, you may do so by e-mailing the editors at:

newsletter@pacificopenheart.org

Change of Mailing Address

Effective immediately, the mailing address for POHA will be:

PO Box 45001, Ocean Park PO, Surrey, B.C., V4A 9L1

Mail sent to the "old" address will be re-directed for a short period of time.

Pacific HeartBeat Newsletter

The newsletter is published semi-annually by the Pacific Open Heart Association.

Editors:

Mike Martin and Patrick Hagan

Acknowledgement

The POHA acknowledges the generous support of the Founder's Cup Charity Foundation in the production of this newsletter.

MEMBERSHIP REQUEST					
NAME:					
ADDRESS:					
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I AM INTERESTED IN:					
BEING A VISITOR BEING A VOLUNTEER GOLF					