OPEN SKIES

Department of Surgery Newsletter

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WHAT'S INSIDE

Drs. Abbas Khani-Hanjani & Aly Ghoneim, Cardiac Surgery

University of Saskatchewan

Saskatchewan Health Authority

CHAIRMAN'S MESSAGE

"We have learned a lot from the previous waves and the Department is prepared to balance the pressures of COVID on the health system while continuing to provide as much safe surgical care as possible."

I want to start 2022 by thanking the members of the Department for all their hard work, resilience, and dedication to provide surgical services to the people of Saskatchewan while facing the challenges of the pandemic. COVID is not over, and we are now dealing with the Omicron variant and a fifth pandemic wave. We have learned a lot from the previous waves and the Department is prepared to balance the pressures of COVID on the health system while continuing to provide as much safe surgical care as possible.

New initiatives to dealing with the COVID backlog are being implemented and we have started to work with an orthopedic service-line that will bring innovative solutions to increase our surgical output. This initiative will serve as a model for other specialties in dealing with the surgical backlog.

Coordination of surgical needs across the province when services are affected by COVID demands have been greatly facilitated by the members of the Saskatchewan Surgical Council and Surgical Directors from all the regions. This team meets on a regular basis to update the situation in each region and provides a panoramic "line of site" on the status of surgical activity and demand in Saskatchewan. This allows us to level load and coordinate surgical services in real time. This provincial approach to surgical demands may serve as a model for other jurisdictions.

Despite the COVID pressures, we continue to innovate. The first deployment of a hybrid stent in a patient with an acute aortic dissection was carried out by our cardiac surgeons. Under the leadership of Dr. Brian Ulmer, the Department is instituting a standardized provincial morbidity and mortality (M&M) rounds in all surgical centres of Saskatchewan. This standardized approach will be facilitated by our proprietary M&M smart phone app. Our transplant surgeons are actively engaged in the First Nations and Métis Organ Donation and Transplantation Network, it is expected that this work will increase donation and access to transplantation by Indigenous and Métis communities in Saskatchewan.

Finally, I want to congratulate the recipients of our teaching awards for their commitment and dedication to our learners, you are role models for the next generation of surgeons.

Sincerely,

Ivar Mendez, MD, PhD, FRCSC, FACS, FCAHS
F.H. Wigmore Professor of Surgery
Saskatchewan Provincial Head of Surgery

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FIRST NATIONS & MÉTIS ORGAN DONATION

The First Nations and Métis Organ Donation and Transplantation Network

FIRST NATIONS AND MÉTIS ORGAN DONATION AND TRANSPLANTATION NETWORK: ADVANCING THE CONVERSATION

An informal audit of the kidney transplant waitlist in Saskatchewan in 2014 revealed that over 50% of the people on the list identified as First Nations or Métis. Given that approximately 16% of the population of Saskatchewan consists of First Nations and Métis individuals, this means Saskatchewan's Indigenous population are over three times more likely to need a kidney transplant. This is in keeping with higher rates of diabetes and kidney disease experienced by Indigenous peoples in the province. Moreover, there is currently no way of knowing if many more Indigenous people would benefit from a kidney transplant but are not being waitlisted or are not accepting of a transplant.

The statistics caught the attention of Dr. Caroline Tait, a medical anthropologist, who is herself Métis, and Dr. Mike Moser, a transplant surgeon. After much discussion and planning, a Think Tank of Indigenous Elders, Knowledge Keepers, persons with lived experience of organ donation and transplantation (ODT), and Indigenous and non-Indigenous researchers, healthcare professionals and students met for the first time in May 2019. The group became the First Nations and Métis Organ Donation and Transplantation Network and would go on to hold monthly in-person meetings and secure research funding. The Think Tank reluctantly adopted an online format in March 2020 when the COVID pandemic struck and has been meeting online ever since.

Despite the serious limitations of the virtual meetings, this format allowed ODT practitioners, researchers, and Indigenous persons with lived experiences from across Canada, the United States, Australia, and New Zealand to take part in our group's discussions. The Think Tank now has an international network, with Indigenous peoples from multiple countries joining in collective work.

The Network's discussions have led to many observations; for example, contrary to the prevailing belief in Western Medicine, not all Indigenous people forbid the donation of organs and tissues. Instead, this form of "gift-giving" is commonly considered a noble and selfless act. Our research has also determined that significant barriers and gaps in health and social services, negatively impact the ability of many Indigenous patients to be placed on transplant lists.

The Think Tank facilitates free and open exchange of information between Indigenous persons with lived experience, Elders, Knowledge Keepers, medical practitioners, researchers, and policy makers. Our main goals are to develop culturally safe public education strategies to be delivered to Indigenous peoples, including in Indigenous languages. The Network also advances culturally safe care and micro-reconciliation work in healthcare contexts, including when healthcare providers approach Indigenous families about donating the organs of a loved one, and when supporting Indigenous patients through their transplant or donation journey.

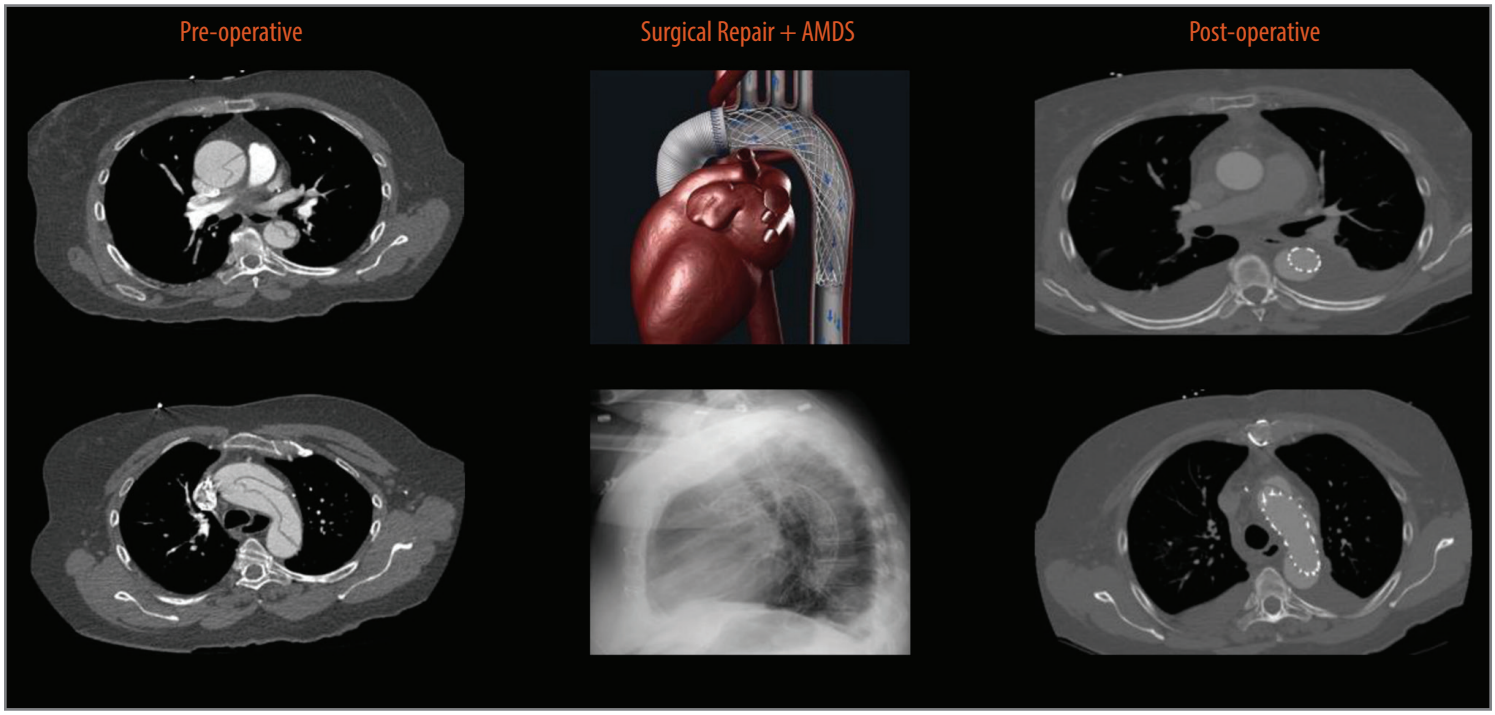
(Article written by Mike Moser, Department of Surgery & Caroline Tait, Department of Psychiatry)

CARDIAC SURGERY ADVANCEMENTS

SASKATCHEWAN'S FIRST ACUTE TYPE A DISSECTION REPAIR USING AN AMDS HYBRID STENT

In what constitutes a first in the province of Saskatchewan, the division of Cardiac Surgery at the Royal University Hospital (RUH) has announced that they have successfully repaired a complex case of acute aortic dissection using a non-covered hybrid stent (AMDS). The operation was carried out at night on the 28th of November, 2021on a 57-year old female patient transferred to the RUH in critical condition after being diagnosed with acute Type A Aortic Dissection (TAAD).

Her CT scan showed acute dissection starting at the aortic root, passing through the ascending aorta, aortic arch involving all great head vessels, and extending in the descending thoracic aorta down to the iliac arteries.



Dr. Aly Ghoneim, with the support of Dr. Abbas Khani-Hanjani (Head, Division of Cardiac Surgery), succeeded to save the patient's life, repair her aortic valve replaced the ascending aorta and hemi-aortic arch in addition to deploying the AMDS stent in both her aortic arch and descending thoracic aorta. Her post-operative course was uneventful, and she was discharged home a few days later.

Type A Aortic Dissection (TAAD) presents itself emergently. Left untreated, mortality of TAAD is reported to be approximately 1% to 2% per hour after the onset of symptoms and can lead to 50% mortality in the first 48 hours. Surgical repair remains very challenging, with mortality and neurological complications rates of 15% to 30%.

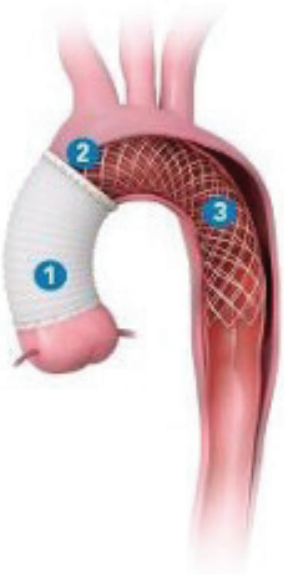
The new AMDS Hybrid Prosthesis Elevates the Standard of Care for Acute TAAD.

- It provides an anatomical and "hemodynamic" correction.
- Reduce perfusion of the false lumen/Restore distal perfusion of the true lumen.
- Reduce the incidence of Malperfusion Syndrome.
- Reduce aortic enlargement and the need for future re-operations.

Type A Aortic Dissection

Standard Conventional Repair

Surgical Repair + AMDS



(left to right) Drs. Abbas Khani-Hanjani & Aly Ghoneim, Cardiac Surgeons

It took the unrelenting work of an entire team to achieve this medical and scientific feat, unprecedented in our province. The team was comprised of Dr. Aly Ghoneim (Lead Surgeon), Dr. Abbas Khani-Hanjani (Chief of Cardiac Surgery), Dr. Malcolm Lucy (Cardiac Anesthesia), Joanne Marcoux (Head of Perfusionists), and Dr. Jay Shavadiah (CCU/Cardiology).

Dr. Ghoneim (MD, Ph.D., FRCSC) completed his Cardiac Surgery training at McGill University before pursuing his training in minimally invasive, Transcatheter, and Aortic Reconstructive Surgery at the University of Western with Dr. Michael Chu. Subsequently, he was recruited by Dr. Ivar Mendez and the Department of Surgery to join the Division of Cardiac Surgery in November, 2021.

DEPARTMENT OF SURGERY EDUCATION

Dr. Ashley Cox
Keynote Speaker

Dr. Jordan Buchko
Silver Shovel Award

Dr. Nebojsa Kuljic
Bronze Shovel Award

Dr. Kylie Kvinlaug
Surgical Foundations Award

Dr. Shari McKinny
Golden Scalpel Award (Pre-clerkship)

Dr. William Dust
Golden Scalpel Award (Clerkship)

Dr. Peter Graham
Golden Scalpel Award (Postgraduate)

Dr. Brian Ulmer
Lifetime Achievement Award

Marilyn Baniak
Lifetime Achievement Award

AWARDS

On December 2nd, 2021, the Department of Surgery hosted our annual Teaching Awards virtually at a special Grand Rounds. During the rounds, we recognized the Department's most outstanding teachers by presenting awards to six deserving individuals. The award recipients were selected by an awards committee based on multiple criteria, including teaching contributions, evaluations and nominations from learners.

The Silver Shovel Award, recognizing the surgery faculty member with the most outstanding contribution to surgical education, was awarded to Dr. Jordan Buchko.

The Bronze Shovel Award, recognizing the surgery resident with the most outstanding contribution to surgical education, was awarded to Dr. Nebojsa Kuljic.

The Surgical Foundations Award, choosen by the residents in the program and recognizing the surgery faculty member with the most outstanding contribution to surgical foundations teaching, was awarded to Dr. Kylie Kvinlaug.

The Gold Scalpel Awards, recognizing individuals with the most significant contribution to the different phases of the surgical education curriculum, were awarded to Dr. Shari McKinny (pre-clerkship), Dr. William Dust (clerkship) and to Dr. Peter Graham (postgraduate).

Both Dr. Brian Ulmer and Marilyn Baniak were recognized with a Lifetime Achievement Award for their outstanding contributions to surgical education over the years.

The rounds concluded with an address from our keynote speaker, Dr. Ashley Cox from Dalhousie University in Halifax.

NEW FACULTY

Dr. Dimitrious Coutsinos, Thoracic Surgery
Saskatoon, Saskatchewan

Dr. Aly Ghoneim, Cardiac Surgery
Saskatoon, Saskatchewan

Dr. Dimitrios Coutsinos completed the MD-PhD program at McGill University. His PhD was in biochemistry and virology, during which he researched drug resistance development in HIV. Throughout his MD training, surgery quickly became his passion, and he went on to pursue General Surgery at the University of British Columbia. At the end of training, he continued onto a fellowship in Thoracic Surgery, also at UBC.

Although born and raised in Montreal, and having completed his post-graduate training in Vancouver, Dimitri is thrilled to start his career in Saskatoon as part of the Thoracic Surgery group at St. Paul's Hospital. His clinical interests include pulmonary and esophageal oncology, benign foregut pathology, and advanced endoscopy.

When he's not at work, Dimitri enjoys spending time with his wife Kim, and two kids, Penelope and Constantine. Dimitri is an avid road cyclist and is looking forward to exploring the routes in and around Saskatoon!

Dr. Aly Ghoneim is a dual fellowship-trained minimally invasive, Transcatheter, and Aortic Reconstructive Surgeon.

After spending eight years in Montreal, where he fulfilled his residency at McGill University and a fellowship at the Montreal Heart Institute, he moved to London-Ontario completing an additional fellowship at the University of Western.

He arrived in Saskatoon last November to join our Cardiac Surgery department. His practice includes all aspects of modern Cardiac Surgery. Dr. Ghoneim is excited to be joining our Transcatheter valve Heart team and starting a minimally invasive cardiac surgery program. He also has special interests in total arterial coronary revascularization and aortic valve reconstructive surgeries.

Outside of work, he enjoys hiking and traveling with his family to explore different cultures worldwide.

M&M PROVINCIAL INITIATIVE

A STRUCTURED APPROACH TO SURGICAL MORBIDIDITY AND MORTALITY ROUNDS (M&M)

Surgical quality assurance strategies must be designed to enhance all aspects of patient care. There should be a standardized continuous cycle of evaluation to improve the delivery of good patient care and monitor the effectiveness of corrective measures.

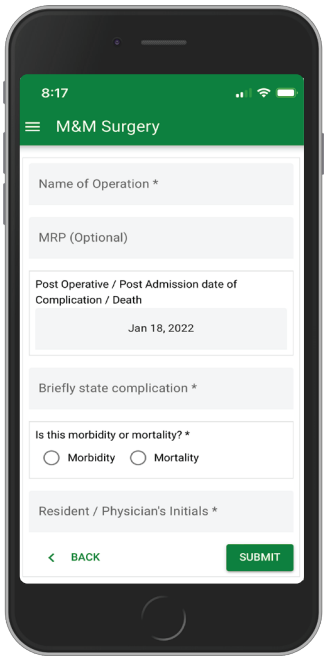
Since the early 1900's the cornerstone of surgical quality assurance assessment has been the M&M rounds. Multiple studies have demonstrated that many institution M&M's have no structured case analysis or an effective administrative pathway for actionable concerns in a nonjudgmental environment.

In 2012 the Ottawa Department of Emergency Medicine developed a new approach to enhance the quality of the M&M experience. It became known as the Ottawa M&M Model or OM3 and has become the standard of M&M for many Departments throughout the world.

The OM3 framework involves four key principles:

1. Not all cases are suitable for M&M discussion – some adverse outcomes are unpreventable.
2. M&M time should be focused on cases where lessons can be learned.
3. A structured approach to case analysis to determine if any cognitive or system issues have occurred.
4. An administrative pathway to act on actionable concerns.


Dr. Brian Ulmer



Over the last year the Provincial Department of Surgery has had many presentations and held discussions with surgeons to improve the M&M experience. The following five changes to the M&M rounds will be instituted in this upcoming year for all surgical divisions in the province:

1. The newly developed Department of Surgery secure M&M App will become the only method for submitting all M&M data. The M&M App is readily downloaded to android and apple devices and is available to all surgeons and residents.
2. The Department asks that all divisions use the OM3 approach for case analysis and assess whether cognitive or system issues may have affected patient outcomes.
3. Division Heads will designate a faculty member to act as M&M coordinator who will lead the M&M as well as document the proceedings. A standardized summary sheet of the M&M will be emailed by the coordinator to the Department of Surgery M&M office for secure storage.
4. The Provincial multidisciplinary Surgical Quality Committee chaired by Dr. Gary Groot has expanded its membership to now include patient family advisors and designated Quality Assurance surgeons from each provincial district. This change will aid surgeons in accessing an effective strategy for potential actionable issues.
5. To enhance the faculty learning experience, an online M&M educational program will be developed to incorporate Royal College of Physicians and Surgeons Maintenance of Certification activity, in particular, obtaining section 2-3 credits.