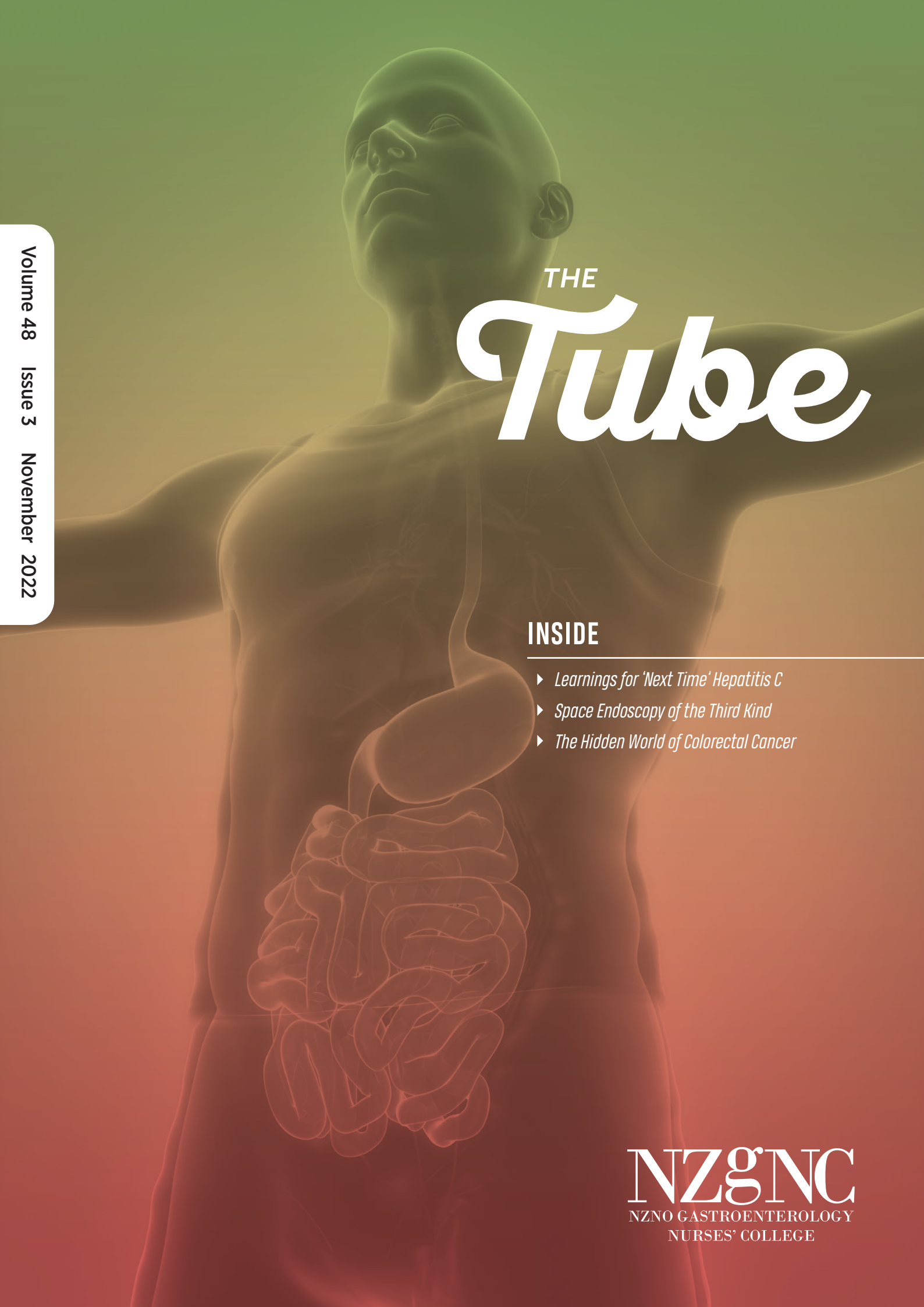
Volume 48 Issue 3 November 2022

THE Tube



INSIDE

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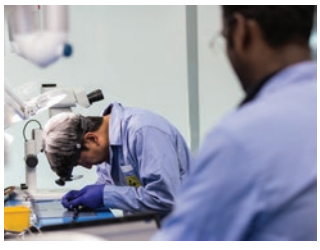


Olympus Academy

The Olympus Academy team is dedicated to educating the specialists of tomorrow. Olympus Academy offers courses and webinars for reprocessing and endoscope training, specific topics include infection control, reducing the risk of cross contamination, and other adverse events related to the reprocessing of flexible endoscopes and surgical instruments. To view course calendar and make bookings visit Olympus Academy website.

Upcoming Olympus Academy Courses & Webinars:

Olympus Gastroscope and Colonoscope Cleaning In-Service Webinar
Tuesday, 6th December | 15:30 NZST

This webinar will provide participants with an overview of the procedure and recommendations for reprocessing Olympus flexible gastroscopes /colonoscopes. Our Clinical Educator will be conducting a live demonstration of the cleaning steps with the opportunity for questions during the cleaning process.

Olympus EUS Cleaning In-Service Webinar
Wednesday, 7th December | 14:30 NZST

This webinar will provide the attendees with a thorough understanding of the steps required to ensure the Linear and Radial ultrasound endoscopes are cleaned correctly and patient-ready, covering the cleaning steps from leak testing procedure through to storage, following the Olympus recommendations. Our Clinical Educator will be conducting a live demonstration of the cleaning steps with the opportunity for questions during the cleaning process.

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NZNO NZGNC
November 2022 Chair Report

Kia ora koutou katoa,

Spring has sprung, as has our wonderfully unpredictable weather- snow one day, beautiful summer the next.

It has been a busy couple of months in gastroenterology across the country, as we continue to have some supply issues, and staffing shortages continue. I think we collectively appreciate the updates from NZNO around progress towards settling the pay equity agreement, so we can move forward.

The committee has 3 sub specialty groups, Inflammatory Bowel Disease nurses, Hepatology Nurses, and Nurse Endoscopy Nurses groups. These groups are coming together to create Knowledge and Skills Frameworks to help develop skills and expertise, and provide a framework for practice. Each of these groups have information on our website, I encourage you to get in touch if you have a special interest in these areas to start working towards career progression.

The NZgNC AGM will be held on Thursday 24th November at the NZ Gastro conference, there will also be a zoom link to attend virtually. Please read the previous minutes, as well as the remit to be voted on, which is in this issue of the Tube. I encourage you to come to conference if you are able, it is a great opportunity to refresh skills, add to your knowledge bank, and connect with nurses and medical colleagues from around the country. Conference is held each year, so if you can't make it this year, factor it in for 2023.

We have made contact with Healthlearn platform to start working on our online education modules, this is an exciting step, and a big project. We will be welcoming support to create content, so if you have a love for teaching, or have some learning packages that you have made for your area, please get in touch with the committee.

The committee have been working hard towards creating a more collaborative connection between our members. Our nurse leaders day, conference, and development of an email group for any of our leaders to reach out to each other is a starting point towards feeling supported in our roles, and an avenue to share with each other.

This is our final Tube for 2022, and also the last edition for our long serving editor and colleague, Karen Gower. Karen's long career in Gastroenterology has seen her contribute to many project and developments. She has shared her skills and knowledge with nurses not only in NZ, but in far corners of the Pacific also - this is truly appreciated. I hope retirement means that you find time to enjoy the things you love most Karen, but don't be a stranger. All the best to you and George. Thank you for all that you have taught us to help us grow.

Merrilee Williams
NZgNC Chair

The Tube
November 2022 Editor's Report

Did you know that the first publication for Gastroenterology nurses was a newsletter put out in 1985. Quite an achievement from newsletter to journal and this has only been achieved by the passionate editors over the years who strived for improvement.

Reviewing the Editor's Report in The Tube, Autumn 1993, Diana Verrall wrote that "To ensure we have a high standard of The Tube it has been decided to have two general issues per annum and pre- and post-conference issues to deal with conference agenda".

Today we are facing a decline in articles which has proved difficult to produce a journal of high standard quarterly. The NZGNC committee at a recent meeting has decided that from 2023 only two journals will be produced with newsletters sent out in between.

As of 1 July 2022 New Zealand disestablished the 20 DHB structures in New Zealand.

Health Futures Act

– Pae Ora received royal assent on 1 July 2022.

Te Whatu Ora

– Health New Zealand, manages all health services nationally and works in partnership with **Te Aka Whai Ora** – Maori Health Authority.

Whaikaha

– Ministry of Disabled People, has also been established to focus on the disability sector.

The reform states that the change will create a more equitable, accessible, cohesive and people-centred system that will improve health and wellbeing for all New Zealanders.

In my 40+ years of nursing I have seen many changes in the health system, but none have achieved the expected outcomes, that the marketing speak has pushed to bring the health workers on-board. The truth is that it has been around saving money not increasing services which have been swamped with patient numbers and require facilities and staffing to meet the need.

In the early 90's we saw the closing or reduction in services of hospitals outside the cities with the idea that we would have 5 major hospitals in New Zealand. Redundancies or redeployment was the talk of the day for all in the health sector and smaller communities became very vocal.

Today I see the same issues with staffing both nursing and medical as in the 1980's when I was in charge of a DHB unit. Equipment was impossible to acquire and we were reduced to wasting money on repairs. The need for extra space because of our workload was questioned and ultimately refused because money was supposedly required elsewhere. There was and still is no vision amongst those in power as to the importance of Gastroenterology and its rapid uptake by the medical fraternity for patient outcomes. Trying to perform procedures in units that are half the size they should be and also lacking in the most modern of facilities and equipment is to me a sad state of affairs.

Croft Print, Christchurch has continued to format a great E journal for the college. This is only possible with the posters, articles and reports members supply to me. I am waiting for articles on unit history which is a great way to preserve history. Find forgotten photos and talk to those who are close to retirement or retired. As nurses, we love to read about how endoscopy has evolved and also how others are managing. There is an editor's prize each year for the best article which is presented at Gastroenterology NZ conference so get pen to paper.

The College has an Education/Travel fund available for members to apply for. This covers Conferences, travel and any study you may be partaking in. Go to our NZNO Gastroenterology College website and fill in the form. Do not be shy about applying as the money received form conferences curtesy of a generous NZ Society of Gastroenterology, is used for this purpose.

Closing dates:

1 March
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To collect payment from the education fund you need to have your reports in by due date which is given in the approval of application letter.

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See you at conference, the Cordis in Auckland November 23 to 25th, 2022.

Karen Clarke
Editor NZGNC

Where oh where

Did you see that caring care, as it went from here to there?
As it went there to yon, oh where has all that caring gone!

It has gone to you know where. Who thought that caring was never there?
Twas never there, so they did say. So caring care just went away.

It went away and was replaced, by high tech care that took its place.
That cures and heals and keeps a stance, the technology of the medical dance.

The cost of caring was far far more, than Government and Hospitals could ever wish for.
The nurses left to give way their care from here, and moved elsewhere.

And one day soon it will be told, "The care has gone!" "The place grows cold!"
So if you're sick and in some need, of nursing assistance, please take heed.

It may be you that will need a hand to wash, or dress, or walk, as planned.
With a caring nurse there by your side. Don't let care disappear on that retreating tide!

Reforms will come, reforms will go. Restructuring is part of the efficiency flow.
But in the future let us hope that there will be, a caring nurse to look after you or me.

Into the future it is hoped that we will still see, a nurse looking out for you and me.
A nurse that cares with compassion and pride, for a patient who needs the care, inside.

It will not be money for gain, or the cost that will stifle care, you wait and see.
For the nurse who cares is the nurse that will be in front of the nursing fraternity.

A poem on caring published in, The Tube, February 1999 by Shona Blair who was a Unit Manager at Southland Hospital in 1999'

NZgNC Leader's Day
26th August 2022

NZgNC
NZNO GASTROENTEROLOGY NURSES' COLLEGE

The annual endoscopy leaders' day took place in person this year in Christchurch, with over 40 leaders in attendance. The committee were thrilled with the numbers of participants from diverse areas of leadership and felt privileged that we got an opportunity to provide a platform to connect, collaborate and communicate with each other.

The title of the day was 'Positive Healthy Leaders' which focused on Connection, Communication and Collaboration (the timing of this day seemed perfect, as we reconnected with each other after the pandemic and its associated lockdowns and restrictions).

Once underway, the day began with a gathering and collating of words offered by the participants to describe how they had felt before they arrived. These words included: nervous, intrigued, curious, hopeful, and thankful.

Key speaker for the day was Sarah Linton, a catalyst coach who likes to create ripples and waves of updated thinking to create changes amidst the ebb and flow of everyday living. She was a very motivational speaker and focused a lot on self-care and how we can create our own energy with tips and tools about how to manage this; particularly looking at mindfulness, box breathing, and a happiness hack – channelling your happiness chemicals.

Connection:

By attending this educational day these 'positive healthy' leaders showed that they remain curious and open to learning which is vital to leading with compassion. The day offered the opportunity for this group of gastroenterology leaders to reconnect and reinvigorate with the hope that the positive energy created rippled back to their own individual teams.

Communication:

The communication session started with a discussion around incivility and the cost of rudeness; the TED talk in the helpful links section below is insightful and is only 15 minutes long so worth a watch. Sarah talked about how we as leaders receive feedback and how our emotions should be calm and grounded when we are sometimes challenged. If we manage to stay calm then we appear alert, engaged and decisive. Leaders who can trust themselves can empower others. A lot of information is available about the power of active listening.

Collaboration:

The group had time to engage with others to generate ideas and put into practice the connection and communication tools we had discussed in the morning. The pictures below show an enjoyable 'active-listening' activity, with some interesting results!

At the end of the day there was time to share resources and we had a group discussion was held around telephone pre-assessment, bowel prep and lots more. The day was immensely productive for everyone in various ways including the vast amount of information shared by the leaders working in different settings.

Before we all went back to our individual responsibilities we asked for one word from everyone present to describe how they felt now that the day was finishing, these words included: connected, empowered, enthused, grateful and reflective.

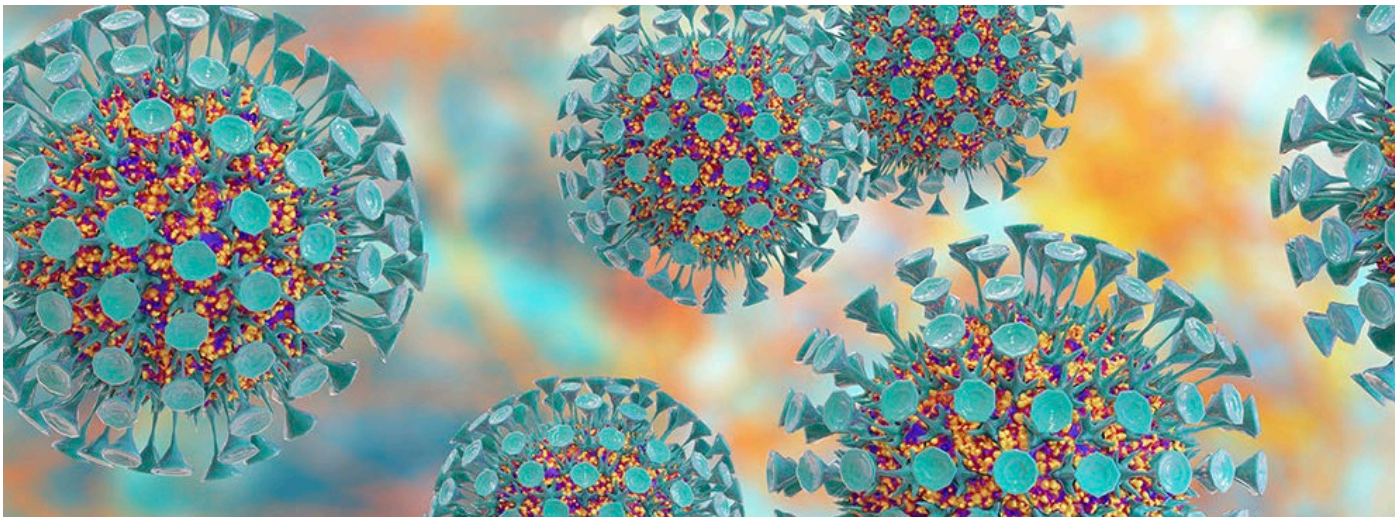
We are confident that each one of the participants took something away with them on that day, that will be helpful in their journey as a leader. Thank you to all the leaders that took some time out from their busy worlds to attend, and for investing in yourselves. We hope you enjoyed the day as much as we did.

Helpful links:

- Liz Fosslien: https://www.fosslien.com/
- Christine Porath: Why being respectful to your coworkers is good for business | TED Talk

The NZNO Gastroenterology Nurses College Committee.

Learnings for 'Next Time'
Hepatitis C Point of Care Testing



On Saturday I had the opportunity and pleasure to attend the annual Moana Nui Festival at the Dunedin stadium. It is a celebration of the cultures of the Pacific. A day when hundreds of people of all ages and walks of life come together to enjoy cultural displays of dance, music and traditional food from the different Pacifica nations.

When asked to join, alongside our Bowel Screening team, to provide point of care (POC) testing for hepatitis C, I jumped at the chance; thinking there would be 'screeds' of people lining up to be tested. And why not? It was free, accessible and health-related. I even anticipated having to whip away and photocopy more consent forms when I ran out. Well as it turned out, I didn't use even one consent form. In fact, there was no interest in Hepatitis C all day! How could this be? I had ensured my happy "come and chat with me" face was on, and the display was bright and inviting.

After some initial grumblings about "wasting my day off", I took the time to reflect (once I had thawed out, having had a cold breeze blowing from the harbour onto my back all day) on how I could have done things differently. There was plenty that could have been done if I had taken more time to understand the nature of the day, the people attending and how to present the information in a more meaningful and relatable way.

Firstly, given that Hepatitis B is prevalent in the Polynesian community, I would promote the services of the NZ Hepatitis Foundation (NZHF), with their consent. Many people may have already been familiar with the NZHF and thus more likely to come and chat. Secondly, I would frame the display as being more around 'liver health'. Regardless of hepatitis, liver health is relevant to anyone who walks and breathes. The Hep C POC testing then could be introduced and used as a tool to check 'liver health' as opposed to being 'front and centre' and for some perhaps too confronting given the prevailing negative perception around Hep C.

Another consideration was positioning of the display. We were allocated a space well away from the other health-related services that offered wellness checks amongst other things. The synergy would have been so much better if we were part of the 'health hub' where people could wander by, and chat naturally as opposed to making a deliberate and obvious bee-line to our display.

So, my advice to anyone attending community events to offer hep C POC testing is:

1. Understand the nature of the event and who will be attending
2. Put thought into how best to deliver and provide information
3. Be clever about how to offer ('frame') Hep C POC testing
4. Strategically position the display alongside other health-related providers
5. Always have a warm puffer jacket handy!

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Space Endoscopy of the Third Kind

Vanessa Mathieson,
CNS Endoscopy,
Christchurch Hospital

I would like to thank the NZGNC, the nurse manager at Christchurch gastrointestinal unit and the Westmead endoscopy unit manager for supporting my visit to Sydney in August this year. I was lucky enough to spend 2 days at Westmead Hospital endoscopy unit and attend the GENCA conference.

During my observational visit to Westmead, I was able to watch multiple procedures including ESD (endoscopic submucosal dissection), POEM (per oral endoscopic myotomy) and EMR (endomucosal resection). I have an interest in interventional procedures and find it fascinating how the endoscopist seemingly slices through the layers of the mucosa, removing polyps or lesions. As easy as they had made this look, years of training and perfecting the art of endoscopy has not been an easy task I'm sure.

I had heard of "third spacing" from my days on the surgical ward, where fluid moves out of the intravascular space and into the interstitial space, but what is third space endoscopy? Third space endoscopy is a very similar concept, however the endoscopist is intentionally making a fluid filled space between the submucosal layers to allow safe removal of abnormal tissue (figure 1).

EMR was first developed in Japan in the 1980's for the treatment of early gastric lesions and has since expanded its use to include benign and early malignant lesions of the oesophagus and small and large bowel (Rashid, Alomari, Afraz, & Erim, 2022).

EMR and ESD are minimally invasive techniques that offer a curative approach for patients that would otherwise require surgical resection. ESD is technically more challenging and requires safe training cases for endoscopist's to master its technique. Patients are carefully selected for either EMR or ESD and their pathology must match the treatment.

ESD was developed to remove larger lesions, lesions that won't lift due to fibrosis, and lesions at risk for submucosal invasion. It aims to achieve higher rates of enbloc resection than is possible with EMR, thus allowing accurate pathology staging and avoid missing important histological features (Pimentel-Nunes et al, 2012).

The margins of the lesion are carefully inspected, and the Paris Classification is used to stratify the risk of deep submucosal invasion based on the visualised features of the lesion. Chromoendoscopy and narrow band imaging are commonly used for this assessment (Rashid et al 2022). Alarming features include depressed lesions, ulceration within the lesion and wall deformity, all of which are predictive of invasive carcinoma that may require surgical treatment (Rashid et al 2022).

Depending on the size of the lesion, the margins may be marked by using a snare tip and soft coagulation. Then using a fluid cushion injected into the submucosal layer to push the lesion away from the muscularis propria, EMR enables a deeper removal of abnormal tissue than traditional polypectomy (Rashid et al 2022). A snare is used to perform piece meal or en bloc resection (less than 20mm) either with or without diathermy. Electrocautery can be used cautiously to ablate any remaining parts of the lesion that remain after resection has taken place. Argon plasma coagulation (APC) and low voltage electrocoagulation using the tip of the snare (also known as "snare tip soft coagulation") are two specific alternatives (figure 2).

ESD is a technically challenging approach that is highly successful and enables accurate margin detailing that allows suitable follow-up. Regardless of the organ, ESD is used to treat precancerous lesions and early-stage gastrointestinal malignancies that are unlikely to spread to the lymph nodes. Additionally, it can be used to treat persistent or recurring disease (Misumi et al 2021).

For ESD, the margins are determined using the same methods as for EMR and best visualisation in ESD requires a distal cap. The most common ESD procedure begins by creating a boundary with thermal marking about 3-5 mm from the lesion's margins. Then, a lifting agent is injected submucosally into the area surrounding the lesion. A circumferential mucosal incision is then performed around the lesion and reinjection of the submucosal solution and cautery dissection are done to gain an enbloc resected lesion (Rashid et al 2022).

The specimen is carefully removed with a rothnet and pinned to either cork, polystyrene or thick paper to avoid shrinkage. The needles holding the lesion

in place should not stretch it but pin it down loosely. The specimen should be completely immersed in the formalin pottle.

The most frequent complication of these treatments is bleeding, which includes intraprocedural and delayed bleeding that can happen anywhere between 6 hours and 7 days following the procedure. Haemostatic clips, haemostatic forceps, or soft coagulation using the tip of the snare are frequently used to control immediate bleeding (Kim, 2022).

Perforation following EMR is uncommon and is recognised by the "target" sign on the resected tissue and mucosal wall defect. The transected surface will have a white to grey core circular disc surrounded by blue stained submucosal tissue, giving the appearance of a "target" if the muscularis propria has been accidentally resected (Hwang et al 2015).

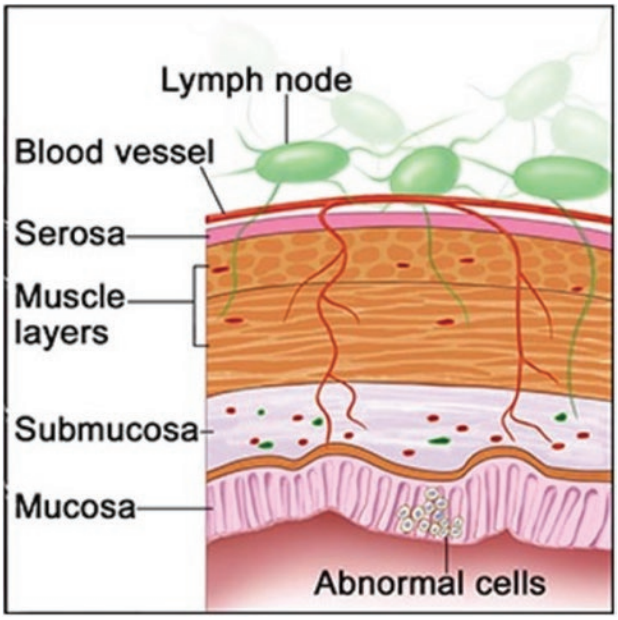

Figure 1

ESD procedure:

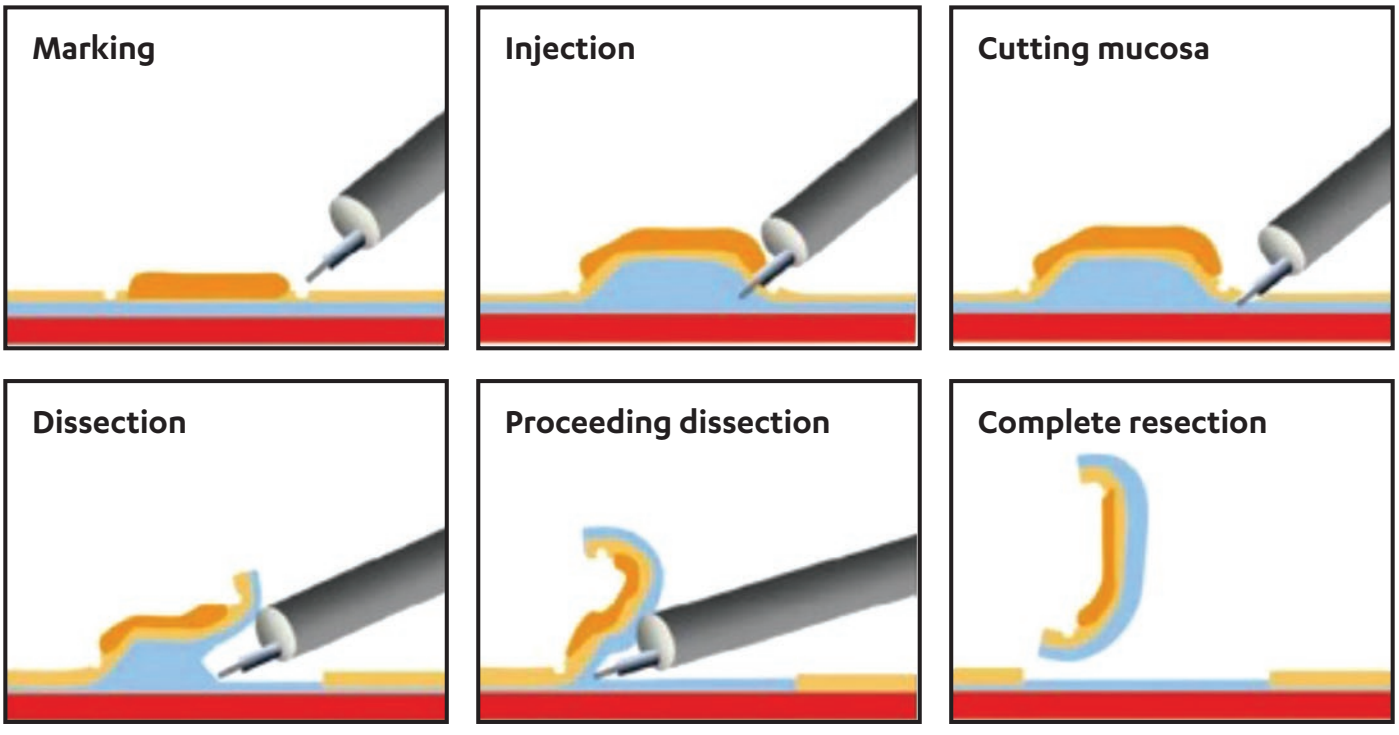

Figure 2

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EMR procedure:

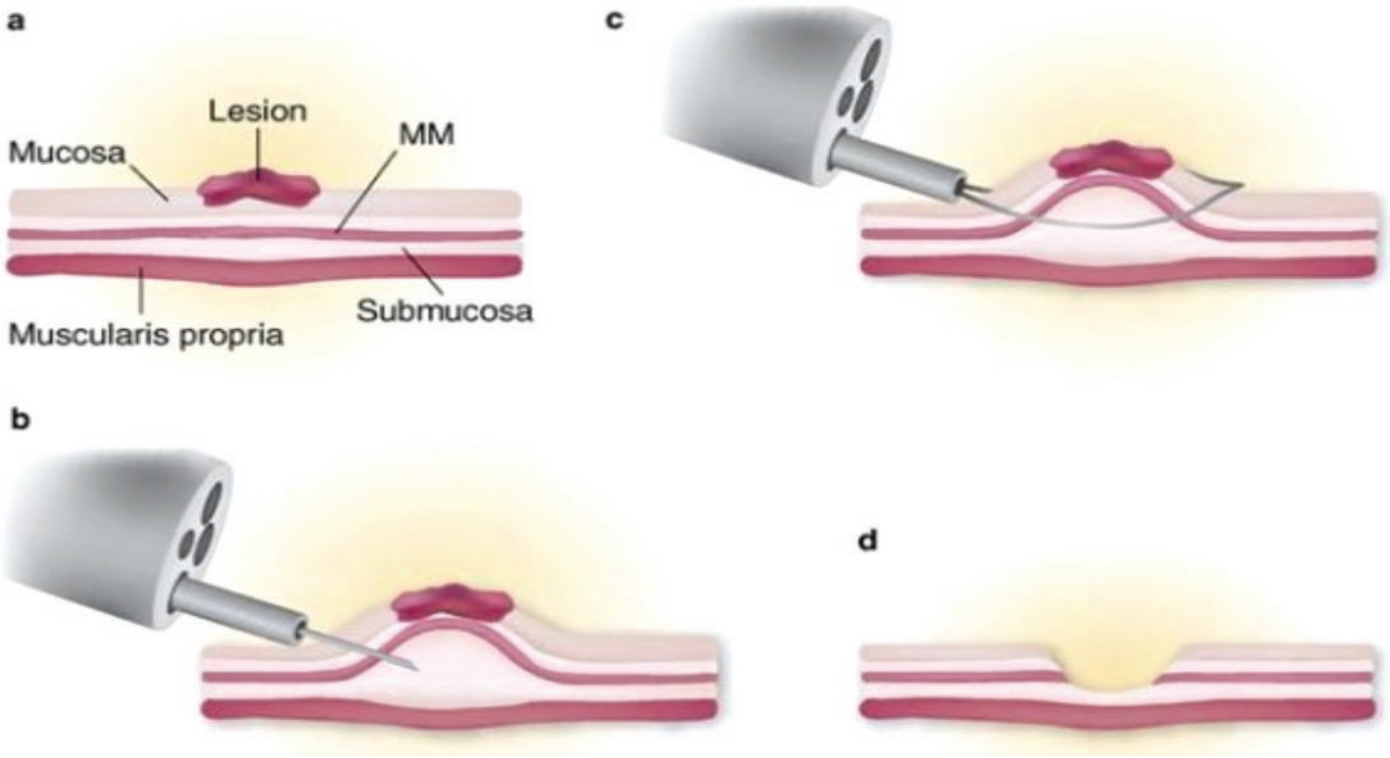

Figure 3

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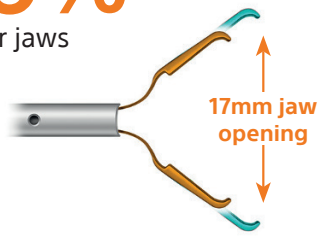

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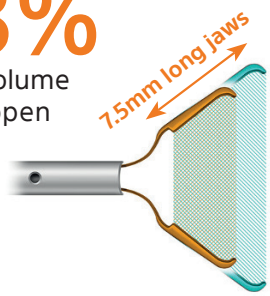

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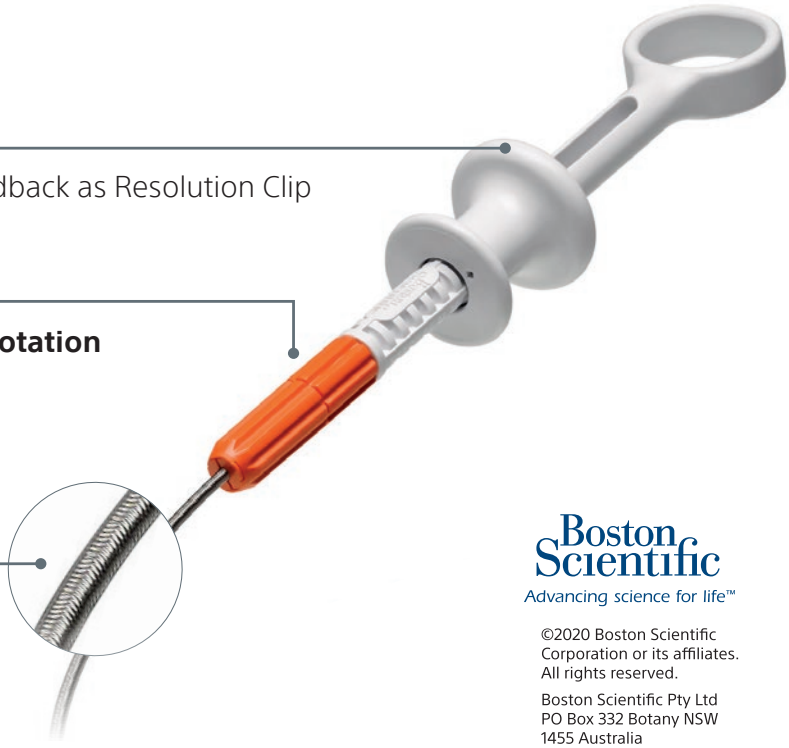

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NEW ZEALAND HEPATOLOGY NURSES ANNUAL REPORT

New Zealand Society of Gastroenterology Annual Scientific Meeting

Auckland 24 November 2022

Committee: Judith McLaughlin (Chair), Bridget Faire (Secretary), Jessica Southall (NZgNC liaison), Jacqui Stone, Susan Gale

2022 has been a year of re-establishing and re-focusing the New Zealand Hepatology Nurses Group (NZHNG).

May saw the foundation Chair Nancy Carey and Co-Chair Jo De Lisle step down from their positions and committee after three years of disruption from Covid to cyber-attacks. Elections were held and I was elected Chair. We also welcomed new members Susan Gale and Jessica Southall. Jessica is also a member of the New Zealand Gastro Nurses College (NZgNC) committee so has been the NZgNC liaison person. This has enabled seamless communication between the groups which has been very beneficial with a new Chair and committee.

The Group has focused on three main projects this year.

1. The first has been membership. Membership has been reviewed and updated with more than 20 new members enrolled after raising awareness of the NZNHG at a nurses' education meeting in August. This list has been circulated to all members to enable networking throughout NZ and includes nurses from primary and secondary care settings.

2. We updated the Terms of Reference to more accurately reflect the roles and responsibilities of the group and these have been uploaded to the NZgNC website.

3. We have contributed articles to the Tube magazine each edition, and these have focused on updated guidelines and best practice. While intended primarily for the benefit of hepatology nurses, we are also wanting to raise awareness of hepatology nursing in NZ.

In addition to these projects, we submitted a response to Medsafe regarding an application to increase access to Maviret, a drug used to treat hepatitis C, through exemption to prescription status for specific nurses.

This response was developed following consultation with members via online meetings. As a group, we had previously investigated the possibility of standing orders for Maviret but this had not been progressed once Maviret was added to the list of drugs nurse prescribers can prescribe. Our response to Medsafe was that we support the Nurse Prescribing of Maviret but with better access and support to those educational pathways already established. We do not support another means of an educational nursing pathway as proposed in the application to re-classify Maviret.

We are slowly getting things uploaded to the NZgNC website and plan to share as much as possible here in the not too distant future. With the establishment of Te Whatu Ora Health NZ, we are looking forward to national guidelines and working with the NZ Society of Gastroenterology to establish these.

Going forward, we are refocusing our efforts on writing guidelines which focus on key skills and competencies for nurses working with patients with liver disease. These are intended to be used by nurses working in a variety of settings from primary care to prisons to the transplant unit.

Report of the NZ IBD Nurses Committee as Sub-Committee to NZgNC

Committee: Jacqui Stone (chair) – stepped away from March – July 2022 owing to workload, Marian O'Connor (co-chair) Kirsten Arnold (co-opted as co-chair - May – July 2022 whilst Jacqui away), Karen Murdoch (secretary), Carly Bramley (Education lead)

Report Date: Sept 2022, **Prepared By:** Marian O'Connor, **Reporting Period:** 2022

The IBDNG committee continues to meet monthly via teleconference and on your behalf have been working on the following;

EDUCATION: IBD Nurses Meeting

- The NZ IBD Nurses meeting was due to take place in Wellington in March 2022 but owing to the rising case numbers of COVID at that time, the committee took the decision to postpone
- We have now rescheduled this meeting to take place on **Tuesday the 22nd of November 2022** at the Cordis Hotel in Auckland – which is the day prior to the NZSG Gastro Conference
- We are grateful to NZgNC and NZSG for their support of this proposal to schedule the meeting ahead of NZSG Gastro conference
- In addition, we are also grateful to Janssen and Pharmaco whom have generously supported us with education grants to support our costs of this meeting
- The meeting invite has been sent out to our IBD Nursing group nationwide and flight / accommodation booking is underway
- The agenda is complete, and we look forward to hosing this meeting to ensure education for our nurses nationwide.

GENCA & IBDNA

- Carly Bramley continues to link with the IBDNA Educational group and was recently elected onto IBDNA main committee as the committee wanted to have representation of two people from each state
- Marian continues as a GENCA board director.

CALL TO ACTION

- **A Call to Action (published in Tube, Volume 48 / Issue 2 August 2022)** was written by the committee and co-signed by Merrilee Williams (chair of NZgNC) to highlight the very low numbers of IBD Nurses nationally and the fact that we have lost staff to resignations over the past 18 months
- We sent this signed Call to Action to President of NZSG Zoe Raos and to CEO Belinda Brown and chair of CCNZ Richard Stein
- Conversations over the phone were had with CCNZ whom were concerned and were keen to take this to the IBD Working group
- Zoe Raos requested that we present at NZSG Executive committee on the Call to Action and the committee is grateful for Merrilee Williams undertaking this. The feedback from the meeting is as follows;
  - The committee fully recognised the immense contribution of the IBD Nurse across the country and as a result, the Executive committee is very supportive of our plight
  - There was a discussion around the recent pay equity proposal which de-incentivises progression to senior roles
  - The executive committee agreed to take every opportunity to discuss this issue at DHB and Health NZ level
- As a result, of all the above work we have working with NZSG to finalise a **letter to the Minister of Health** to state the case for a minimum number of IBD nurses per patient population (1 TFE to 600 patients). We do hope to be able to share this letter once it has been sent.

NZ IBD NURSE KSF

- We are also grateful to Christine Ho, Carly Bramley, Lucy Mills, Karen Murdoch & Kirsten Arnold whom have completed the review the KSF document. The group has liaised with the relevant staff at NZNO to ensure that this is compliant with NZNO document development policy
- We anticipate that we will have printed copies of this document available at the IBD Nurses Meeting in Auckland in November 2022.

NZgNC
NZNO GASTROENTEROLOGY NURSES' COLLEGE

NEW ZEALAND NURSES ORGANISATION GASTROENTEROLOGY NURSES COLLEGE

Minutes of the Annual General Meeting of the NZNO Gastroenterology Nurses College to be held at 12:30PM, Hagley Oval, Christchurch on 18 November 2021

Present: Karen Clarke - Chairperson, Rachel Cashmore- Treasurer, Merrilee Williams- Secretary, Holly Weale, Kirsten Arnold, Marian O'Connor, Wanda Owen - Committee members, Julia Anderson- PNA, Daryl McGann, Cara Rowe, Davina McQueen, Donna Howe, Jackie Watkins, Jacqui Stone, Janette Sigvertsen, Karen Kempin, Gretel McKenzie, Marina Richards, Kate Lawrence, Kiran Joseph, Christine Ho, Marie Press, Nideen Visesio, Ana Ratapu, Amie Seymour, Genevieve Cowley, Margaret Fraser, Sue Gale, Rowena Simons, Tamsin Dunn, Amanda-Jane Watson, Amy Spain, Cath Pink, Dale Cornelius, Donna Somers, Jenny Ward, Kaitlyn Doak, Katie Johnston, Kirsty McAllister, Lucy Carroll, Cathy Hodgin, Danielle Pope, Janine Palmer, Ady Leigh, Marilen Kirong, Maureen Reynolds, Nikki Baird, Rachel Rufino, Richard Dy, Rick Seo As, Sam Joyce, Sue Smith, Victoria Harkess, Vanessa Brown, Jo Burnett, Julie Denby, Michelle Harkess.

1. Welcome and Introduction of Committee

Chairperson Karen Clarke opened the meeting.

1.1 Roll Call

1.2 Confirmation of Quorum (24 required)

1.3 Apologies: Nancy Carey, Karen Murdoch (Zoom link fault)

1.4 Confirmation of last Gastroenterology Section meeting Minutes
Moved: The minutes of the Gastroenterology meeting held on **20 November 2020** to be confirmed.

Moved:	Karen Kempin
Seconded:	Holly Weale
CARRIED	

1.5 Matters Arising from 20 November 2020 minutes - Nil

2. Correspondence

2.1 Inwards: Nil

2.2 Outwards: To membership to advise of AGM as well as notify of Remit.

Moved:	Merrilee Williams
Seconded:	Jessica Southall
CARRIED	

3. Financial for previous financial year

Rachel advised the membership that the financial report had been sent back to NZNO for amendment as did not include breakdown of the sup specialties finances. The corrected report will be posted on the college website when received.

Rachel informed the membership that our accounts were healthy with $16k in the accounts. Discussion ensued relating to investment in education for the members over the coming financial year.

3.1 Move any accounts for payment - pending

Moved:	
Seconded:	
LOST	

3.2 Present prospective budget for financial year - pending

Moved:	
Seconded:	
LOST	

4. Report

4.1 Chairperson's Report: Karen tabled a report - posted on website

Moved:	Karen Clarke
Seconded:	Kirsten Arnold
CARRIED	

4.2 Other Committee Reports:

1. Inflammatory Bowel Disease sub specialty
2. Hepatology nurses sub specialty - to be posted on www
3. Tube Editors report
   a. All reports posted on college website ahead of the AGM

Moved:	Holly Weale
Seconded:	Gendy Bradford
CARRIED	

5. Remits

5.1 Rule remits: Remit proposed to amend subclause 8.1.3 to enable difficult to fill committee positions to stay a further year to allow for a hand over teaching period for the incumbent. Only 2 votes received on surveymonkey in lead up to AGM. Put to the floor for vote.

Moved:	Kirsten Arnold
Seconded:	Dale Cornelius
CARRIED	

5.2 Policy remits: Nil.

Moved:	
Seconded:	
LOST	

6. NZNO Reports

6.1 Item - Julia Anderson - Professional Nursing Advisor
Julia Tabled a report that was posted on the college website ahead of the AGM.

Discussion: Briefly around MECA update

Moved:	Julia Anderson
Seconded:	Merrilee Williams
CARRIED	

7. General Business

7.1 Item: Nil.
Discussion: Nil.

Moved:	Karen Clarke
Seconded:	Jessica Southall
CARRIED	

8. National Committee Election

Outgoing members:
Karen Clarke - Chairperson: Thanks given to Karen for her immense contribution to the committee over many years.
Wanda Owen - Committee member: Thanks given to Wanda for her contribution to the committee.

Members elected:
Marian O'Connor - re-elected for a second term of two years
Merrilee Williams - elected as incoming Chairperson
Kiran Joseph - elected as committee member
Karen Kempin - elected as committee member

The meeting concluded at 13:30pm when Karen Clarke closed. The next meeting will be held on November 2022

Chairperson: _____

Date: _____

The Hidden World of Colorectal Cancer

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There is not conflict of interest in this publication

The hidden world of colorectal cancer

When we think of a tumour in the colon, we often think of a large, ugly looking solid mass, however if we take a closer look the complex environment in which the tumour grows is so much more than just a big clump of cancer cells.

The term "tumour microenvironment" is used to describe the complex environment in which a tumour grows. Within the tumour microenvironment we find vast networks of stromal cells, immune cells, cancer cells and bacteria that all interact with one another to influence the growth of cancer *(Figure 1)*.

For many years research into colorectal cancer focused on the cancer cells themselves and how individual factors such as bacteria influenced them. However, this is not the whole picture; more recent research has taken a step back and is now looking at the tumour microenvironment as a whole.

We have found that when a certain aspect of the tumour microenvironment changes, the flow on effects aren't on the cancer cells alone, but the entire microenvironment. Each individual has a tumour microenvironment unique to them and their cancer type, with different factors affecting its makeup, including the pathway in which the cancer develops through.

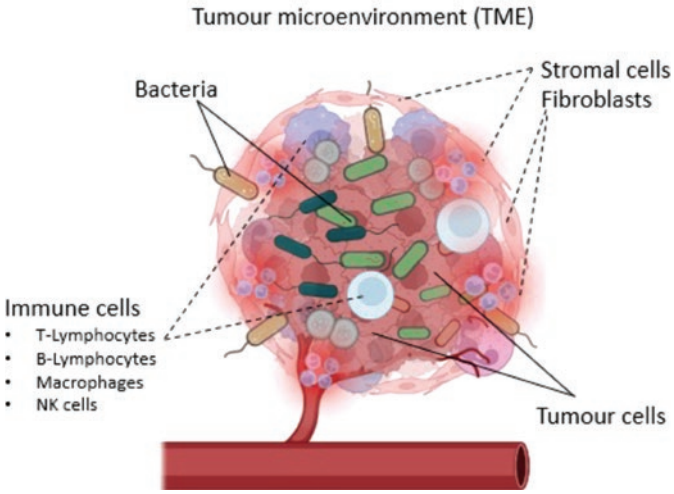

Figure 1: The tumour microenvironment is a complex landscape composed of tumour cells, stromal cells, immune cells, and bacteria.

Pathways of colorectal cancer development

There are two main pathways sporadic colorectal cancer can develop through. The most common being the adenoma – carcinoma pathway in which tubular adenomas polyps grow, acquiring mutations as they develop into cancer *(Figure 2)*. This pathway accounts for approximately 70% of sporadic colorectal cancer.

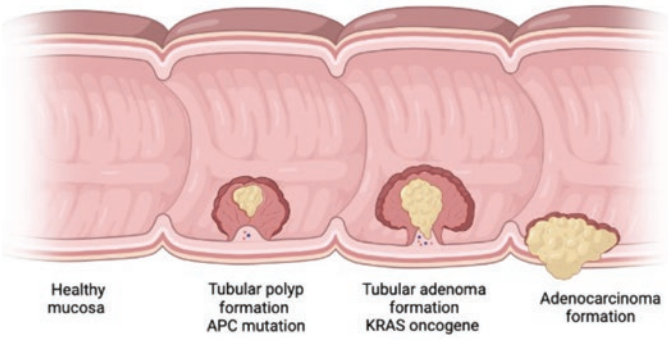

Figure 2: The adenoma – carcinoma pathway

The APC mutation is thought to initiate this pathway. The APC gene is a tumour suppressor gene, and when mutated can allow for cancer to develop[1]. Chromosomal instability (CIN) is characteristic of this pathway. CIN occurs when chromosomes undergo rearrangements, and/or loss or gain of chromosome regions, leading to increased genetic instability, often favouring cancer growth[6]. Cancers that arise from this pathway often have specific bacteria present in their tumour microenvironment, such as *Bacteroides* species[5]. These types of polyps and cancers typically grow in the left colon, and once metastasised, don't respond well to immunotherapy.

The serrated adenoma pathway *(Figure 3)* is less common, accounting for approximately 15% of sporadic colorectal cancer cases.

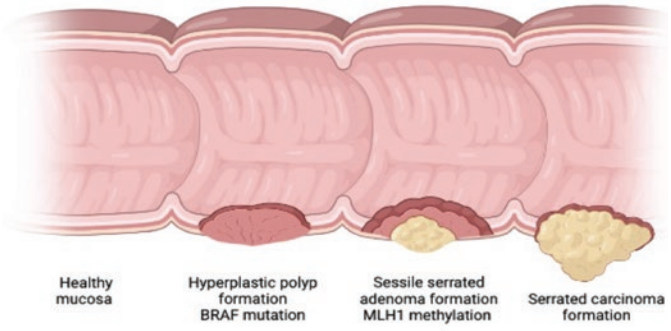

Figure 3: The serrated adenoma pathway

Polyps of this pathway tend to be quite flat and have a serrated or saw-toothed appearance. This pathway typically begins with a mutation of the BRAF gene, causing increased cell growth and survival[2,3]. This pathway is typically characterised by Microsatellite instability, which is caused by mutations in DNA mis-match repair (MMR) genes. MMR genes, under healthy conditions, act like a spell check to repair mutations in the DNA; however, in cancer, these mis-match repair genes are "switched off" which causes an increased mutational load resulting in cancer growth[4]. These cancers are more likely to be found in the right side of the colon, where the bacteria present differs from the left colon.

Bacteria in colorectal cancer

Recent research has focused on how bacteria in the tumour microenvironment modulate cancer development, progression, and even response to therapies. As mentioned earlier the bacteria in each tumour microenvironment can vary depending on which pathway the cancer has developed from.

It is well established that microbial dysbiosis is associated with colorectal cancer. This is when the balance of "good" vs "bad" bacteria shifts to a less than favourable state. We observe increased proportions of pathogenic bacteria in the colon which are believed to help initiate cancer development. Whilst no one bacterial will cause cancer alone, several specific bacteria have been identified in relation to each cancer type.

Escherichia coli (E. coli) is one of the most documented bacteria in colorectal cancer; most strains are non-pathogenic, and live as part of the healthy microbiome. However, one strain known as *+pks E. coli* is able to produce a toxin that causes DNA damage resulting in characteristics seen in cancer from the adenoma – carcinoma pathway[8]. *Bacteroides fragilis (B. fragilis)* is also commonly associated with the adenoma – carcinoma pathway. *Enterotoxigenic B. fragilis (ETBF)* is a pathogenic type of *B. fragilis* that produces a toxin known as BFT. BFT is able to interact with normal intestinal epithelial cells to breakdown certain components of the epithelial barrier to enhance the metastatic ability of cells and induce inflammation[9]. BFT is also able to prevent anti -cancer responses by chronic activation of different regulatory pathways, increasing inflammation and cell growth[9].

Fusobacterium nucleatum (F. nucleatum) are oral pathogens that have several implications in oral disease. However, *F. nucleatum* are commonly found in association with colorectal cancer developing through the serrated adenoma pathway. The effects of *F. nucleatum* within the tumour microenvironment have been thoroughly investigated. Not only does *F. nucleatum* interact with cancer cells but it also plays a large role in immune cell modulation. Several studies have shown *F. nucleatum* is associated with increased immune infiltration into cancers[10]. This increased infiltration of immune cells leads to increased growth of the cancer, inhibition of anti-cancer immune cells, and increased angiogenesis, which causes new blood vessels to grow, supplying the cancer with everything it needs to progress further[10].

However not all bacteria in the tumour microenvironment are bad. The intestinal barrier is a first line of defence against pathogens, and whilst some bacteria like *B. fragilis* through BFT weaken the barrier, others can help to maintain and improve its integrity. Butyrate is a short chained fatty acid produced by a range of bacteria[11]. Butyrate is able to improve the integrity of the epithelial barrier making it less permeable and also reduces pro-inflammatory molecules known as cytokines to decrease overall inflammation.

Bacteria and therapy

Current research has started looking at how different bacteria could influence an individual's response to different therapies. There was a lot of excitement around immunotherapy for colorectal cancer as it had worked really well in other solid cancers like lung cancer and melanoma. In healthy conditions our cells express immune checkpoint proteins, like PD-L1, that allow the immune system to recognise "self" tissue and avoid an immune attack. However, cancer cells can also express these proteins and that's how they avoid immune detection. Immunotherapy targets these immune checkpoint proteins blowing the cancer's cover and allowing the immune system to attack the cancer cells *(figure 4)*.

Immunotherapy works well in cancers arising from the serrated pathway, but not the adenoma – carcinoma pathway. This is because immune checkpoint proteins (e.g. PD-L1) are expressed in much higher levels on the surface of these cancer cells.

More recently, researchers have looked at how bacteria may influence response to immunotherapy. A study published in 2021 looked at how F. nucleatum influenced immunotherapy response[12]. F. nucleatum is commonly found in serrated colorectal cancer, and these tend to respond well to immunotherapy. This study showed that when mice with colorectal cancer were treated with F. nucleatum, the anti – cancer effects of immunotherapy were greater than when they were given the immunotherapy alone[12]. This study alone shows how the bacteria in the tumour

microenvironment can influence therapy, but it may give rise to biomarkers that can predict patient's response rates as well as novel therapies combination therapies.

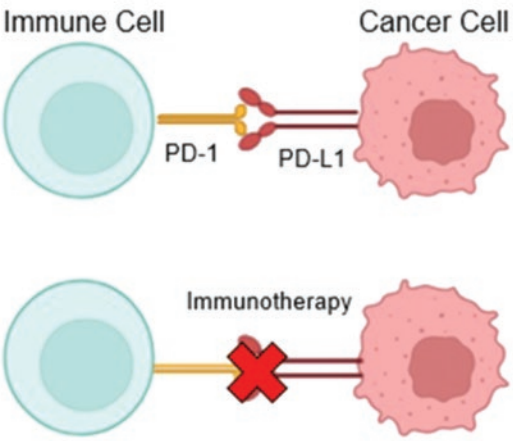

Figure 4: Mechanism of Immunotherapy

Top: Immune cells expressing immune checkpoint proteins (PD-1) bind to cancer cells expressing the ligand (PD-L1) and recognise the cancer as "self" tissue.

Bottom: When the PD-1 PD-L1 interaction is blocked by immunotherapy the immune system detects the cancer and can attack.

Conclusion

This is just the tip of the iceberg – the bacteria in each of our intestines are as unique as our fingerprints, which means the tumour microenvironment is unique to each individual. Until we understand how all of the components of the tumour microenvironment interact with one another, we won't be able to fully understand these cancers. When thinking about how we treat CRC, we need to consider not only the cancer cells but the entire universe that surrounds them; gut bacteria may signal to the immune cell sitting next to the cancer cell, dictating how the cancer grows. These interactions, and cross-talk between cancer cell, immune cell, and microbial cells may help or hinder cancer progression and treatments.

Cancer is a complicated disease, with no patient the same as another, but the more we understand the hidden world of colorectal cancer, the better chance we have at beating it.

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RŌPŪ TĀPUHI HEPATOLOGY O AOTEAROA

NZ HEPATOLOGY NURSES GROUP

An update from Bridget Faire, Secretary for the NZ Hepatology Nurses Group

Nurses have played an integral role for patients with liver disease in New Zealand for many years.

In 1998 The New Zealand Liver Transplant Unit was established leading to many new specialised nursing roles within the service at Auckland Hospital. As a National Service, the NZLTU also relied heavily on the input of local nurses around the country who cared for these patients both pre and post-liver transplant.

The role of the Hepatology Nurse in NZ also came into its own during the interferon treatment era for hepatitis C. Many nurses were employed around the country to help support and manage patients throughout their hepatitis C treatment journey. Treatment for hepatitis C at that stage was a challenging road for the patient and the nurses were there to guide and support, celebrate and commiserate with the patients every step of the way.

Now we have much more effective and better tolerated treatment for hepatitis C (Maviret) and the need for nursing support during treatment has changed. Although it was predicted that as more people got treated and cured of their hepatitis C, there would no longer be a need for the Hepatology Nurse, this has not been the case. Instead, most of us have expanded our roles and taken on new responsibilities. Responsibilities now include managing patients with other long-term liver conditions such as hepatitis B and NAFLD, monitoring patients who have underlying cirrhosis of the liver and need on going screening for potential hepatocellular carcinoma, and co-ordinating treatment and follow up for those who develop hepatocellular carcinoma. Most areas also offer a FibroScan service for staging patients with liver disease and this service is mostly run by Hepatology Nurses.

The Hepatology Nurses have always met regularly for on going education and support from each other. This has always been valued as the Hepatology Nurse often works alone and in isolation from other nurses. As the role developed it became evident that we needed to professionalise the role and develop a pathway that would help support us as nurses. The idea for the NZ Hepatology Nurses Group was put forward in 2019 in a bid to help formalise and professionalise the Hepatology Nurses role. The purpose of the NZ Hepatology Nurses Group is to promote and highlight the role and value of Hepatology Nurses working with patients with liver disease across New Zealand. Our goal is to develop National Guidelines and provide on-going education for our members. We want to be able to provide a national unified voice on Hepatology issues in New Zealand.

To date a small group of nurses have formed a committee to begin establishing this group. Preliminary work has taken place and in 2020 we were accepted as a subgroup under the NZ Gastroenterology College within NZNO. Unfortunately due to limitations secondary to Covid, progress has been slow but we have recently re-established ourselves with new committee members in place that we would like to introduce you to below.

Chairperson, Judith McLaughlin

I work in the Gastroenterology Department at Christchurch Hospital and am a Clinical Nurse Specialist in Hepatology. I have worked in this role for 13 years and prior to that worked as a Hepatitis Nurse in the Department for 5 years. My experience prior to that was in surgical wards so it was quite a big change initially and I wasn't sure it was for me. I have stayed because I love the autonomy I have in this role and the variety of work that I do. A lot of changes have occurred over the years which has kept the job interesting, particularly with the development of new treatments for hepatitis C. It's rewarding that I was involved in some of the clinical trials that led to the approval of these treatments. A typical week involves performing transient elastography (FibroScan), triaging referrals from primary care, coordinating surveillance for hepatocellular carcinoma and seeing patients for review in clinic with a variety of liver diseases but mostly cirrhosis, hepatitis C and hepatitis B. I completed a Master of Health Sciences (Clinical Nursing) in 2017 but have not yet applied to be a Nurse Prescriber.

Secretary, Bridget Faire

I am a Nurse Specialist at the Liver Unit at Auckland Hospital. I have been in this role since 2009. In a previous life I was a Liver Transplant Co-ordinator in New York City for a number of years. When I returned to New Zealand I took on the newly created role of Renal Transplant Co-ordinator and stayed in that role for a number of years before leaving for a short period when my children were small. I worked briefly as a Liver Transplant Co-ordinator at NZLTU prior to taking on my current position. I am also working 0.3FTE for the Northern Region Hepatitis C project which aims to eliminate the harm from hepatitis C by 2030.

Committee Member/NZgNC Representative, Jessica Southall

I am a Registered Nurse at the Gastroenterology Department at Christchurch Hospital. I have worked in the Gastro unit for 9 years where my time is split between endoscopy nursing and hepatology. My nursing background prior to this has been in general medicine at Palmerston North Hospital. I enjoy the

variety of my work and the challenge of working with patients with liver disease and the various hepatological etiologies. I'm currently studying pharmacotherapeutics, working towards my postgraduate diploma. I am a committee member of the New Zealand Gastroenterology Nurses College as the hepatology representative. I'm excited to be part of the hepatology committee and look forward to contributing to the development of guidelines and frameworks for hepatology nursing in New Zealand.

Committee Member, Jacqui Stone

My previous roles working in gastroenterology are extensive. They involve gastro-enterology, endoscopy, research, inflammatory bowel disease (IBD) and stoma care, through to caring for those with liver disease, which has paved the way to become a Nurse Practitioner (NP).

As health care, especially gastroenterology is ever-changing; doing things differently has become a necessity, particularly with the growing numbers of nurses working with liver diseases. The role of a hepatology nurse has evolved considerably over time. This has to be balanced with the need to provide effective care for our population.

I see my role as representing and contributing to the development of hepatology nurses group and supporting them in the future.

Committee Member, Susan Gale

I have relatively recently taken over as the Hepatology, Clinical Nurse Specialist based at the Dunedin Hospital, from Margaret Fraser who retired at Christmas time. Prior to that I worked briefly as a Hepatitis Nurse before 'succession planning' kicked in. Before returning to the 'mother ship', I worked in a variety of nursing roles in the community and for private organisations.

I did not realise it at the time but these roles have prepared me for the CNS role; equipping me with the skills to problem-solve, deal with constant challenges, see the bigger picture and interface with a very diverse client population.

As a 'newbie' to Hepatology, the learning curve has been exceedingly steep but I have thrived on what the role offers in terms of professional and personal growth.

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TUBE Writing Guidelines for Authors

The Tube is the official journal of the NZgNC (New Zealand Gastroenterology Nurses' College), and is published quarterly. We welcome articles that will be of interest to nurses working in Gastroenterology and related. Our aim is to publish a high quality, professional and educational journal for nurses working within the specialty of Gastroenterology.

All manuscripts received by the editor will be acknowledged, however, reports, area news or letters to the Editor will not. If you have not received confirmation of receipt within six weeks, please contact the Editor.

Suggestions for articles include:

- Recommendations for nursing practice based on current global trends/literature
- Overview of learning achieved through post graduate paper, or conference attendance
- Review of literary article relevant to best practice
- Case study relevant to specialty
- Education for nurses based on sub specialty topic

Editorial review/acceptance

Articles submitted to ***The Tube*** are currently reviewed at a minimum by the editor and co-editor. The review will assess the accuracy of fact, clarity of presentation, use of references and relevance to practice of gastroenterology nursing. The editor/co-editor may also request a committee member review any article, particularly if the article is a sub-specialty of gastroenterology nursing and the committee member area of special interest/ work.

All articles which are being considered for publication may be reviewed and returned to the author with suggestions for revisions and improvement. The author will be provided with a deadline in which to provide the revised article in order to comply with publication schedule.

The Editor's decision to publish or reject an article is final. You are welcome to email or phone the Editor to discuss your article should it not be accepted for publication.

Structure of Article for submission

The submission should include the following information:

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