

Volume 50 Issue 1 March 2024

THE *Tube*

INSIDE

- ▶ *Acute variceal bleed insights from Gastroenterology Conference 2023*
- ▶ *What is 'Green Endoscopy' and how do we achieve it in NZ?*
- ▶ *Cholestatic Liver Disease: Primary Biliary Cholangitis (PBS); Part 1*

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WELCOME TO THE OLYMPUS CORNER

2023 NZ Gastro Conference

Wrapping up what has been a busy year, Rotorua played host to the NZSG and NZgNC Annual Scientific Meeting.

A jam-packed programme this year with local and international speakers focused on best practices and new techniques in Endoscopy. As usual the annual conference dinner was a huge hit, and we'd like to take the opportunity to congratulate all the award winners.

On show at the Olympus exhibitors' booth, was the EVIS X1 platform and ENDO-AID – Artificial Intelligence technology which aids Polyp Detection. As well as our latest mid-range EUS Processor, EU-ME3, with enhanced imaging and innovative ultrasound technologies.

There was lots of interest in our consumable range but none more so than EndoCuff Vision, a mechanically enhanced colonoscopy device which is designed to maintain the viewable mucosa during endoscopic therapy. This Endotherapy device compliments ENDO-AID AI and is proven to increase the mucosal surface observed and can increase the Adenoma Detection Rate (ADR) by up to 17%*

In addition, Olympus was a proud sponsor of the Nurses Hands-On workshop for over 30 Endoscopy Nurses. Attendees had the opportunity to get some valuable hands-on experience with Olympus Endoscopes using a simulated colon model and Endotherapy products including Polyloop, EndoCuff Vision, Distal Attachments and Loop Cutters.

Olympus was proud to once again be the exclusive Platinum sponsor. An opportunity we take each year to show our support for the remarkable contribution of Endoscopy Healthcare Professionals in New Zealand. This event provides us with a valuable platform to connect with our customers to share knowledge and experiences and we are grateful for the opportunity to participate.

Giddy Up for 2024. We are ready for a Hoe Down in H-Town! See you there!

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Endoscope Reprocessing Specialist Training (ERST)
Olympus AKL - Thursday 14 Mar | 8:30am - 3:00pm NZST

Endoscope Reprocessing Specialist Training (ERST)
Olympus CHCH - Friday 5 Apr | 8:30am - 3:00pm NZST

Endoscope Reprocessing Specialist Training (ERST)
Olympus WLG - Wednesday 24 Apr | 8:30am - 3:00pm NZST

Endoscope Reprocessing Specialist Training (ERST)
Olympus AKL - Wednesday 14 Aug | 8:30am - 3:00pm NZST

Endoscope Reprocessing Specialist Training (ERST)
Olympus BOP - Tuesday 27 Aug | 8:30am - 3:00pm NZST

Endoscope Reprocessing Specialist Training (ERST)
Olympus WLG - Wednesday 11 Sep | 8:30am - 3:00pm NZST

Endoscope Reprocessing Train The Trainer (TTT)
Olympus WLG - Thursday 12 Sep | 10:00am - 6:00pm NZST

Endoscope Reprocessing Specialist Training (ERST)
Olympus AKL - Thursday 19 Sep | 8:30am - 3:00pm NZST

Endoscope Reprocessing Specialist Training (ERST)
Olympus CHCH - Thursday 17 Oct | 8:30am - 3:00pm NZST

Endoscope Reprocessing Train The Trainer (TTT)
Olympus CHCH - Friday 18 Oct | 10:00am - 6:00pm NZST

Endoscope Reprocessing Specialist Training (ERST)
Olympus PMR - Wednesday 30 Oct | 8:30am - 3:00pm NZST

To book, visit: <https://learn-nz.olympus.co.nz> and register.

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2, 34

4

8

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Contents

NZNO NZGNC Chair Report	5
Acute variceal bleed insights from Gastroenterology Conference 2023	6-7
GENCA Workshops	9
What is 'Green Endoscopy' and how do we achieve it in NZ?	10-13
Cholestatic Liver Disease: Primary Biliary Cholangitis (PBS); Part 1	14-16
Hepatology Nurses Update	17
Meckel's diverticulum seen in a capsule endoscopy, and an analysis of Meckel's diverticulum cases from 2012 – 2022 in Te Whatu Ora - Waitemata	18-19
Inflammatory Bowel Disease Sub Specialty Group Report of the NZ IBD Nurses Committee as Sub-Committee to NZGNC	20
NZNEA Report February 2024 New Zealand Nurse Endoscopists Association	21
NZGNC Application Form NZGNC Education Grant	22-25
Tube Writing Guidelines for Authors	26-27
Gastroenterology Units in New Zealand	28-30
Advertising Rate Card	31

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NZNO NZGNC

March 2024

Chair Report

From the Chairperson

Welcome to the Tube journal for the first quarter of 2024- I hope you will enjoy reading and learning from the articles that are included in this edition as much as I have. Thank you to those who have submitted these to share.

The committee have met for our first meeting of the year, and we will have our first face to face meeting in April, in Wellington. At this meeting, we will set some goals to achieve for the coming term, so if you have any ideas that we can help work towards as your college committee, please feel welcome to get in touch.

A couple of major documents that underpin our practice have been under review for the past couple of years. This includes the PG09 Guideline on Procedural Sedation 2023, and the AS/NZS 4187 Reprocessing of reusable medical devices in health service organisations 2019. These works have now been completed and will soon be available to update your protocols in your practice areas.

We have been able to have input into the final version of the PG09 along with our NZ colleagues of the NZ Society of Gastroenterology, and the College of Anaesthetists, however, we were unable to have input into the 4187. The 4187 will now be an Australian only standard, so we are working with Standards NZ to understand how we adopt these standards to the NZ context, and then adopt them as our guidelines for practice.

The sustainability group continue to meet, and share practical ideas to be able to improve our enormous clinical waste stream in endoscopy. We all have a role to play in this area, so sharing our successes

and ideas will be the way to get started. You can follow the progress of the group here <https://nzsg.org.nz/news-and-events/article/PepJere/waste-management-in-endoscopy>.

Work is underway within NZNO and Te Whatu Ora to assess and create the new Senior Nurses pay scale in recognition of those who work in advanced practice, and leadership roles. This is important work, and it is crucial that it leads to successful negotiation of improved pay rates. We need to encourage more nurses to advance their practice into senior nurse's roles, as well as retain those already working so hard in their existing positions; this will be an important step forward.

The Inflammatory Bowel Diseases nurses group have been in contact with NZNO to be involved in this work, and have collected data relating to their specialty nurses workforce, and work load to share with the NZNO senior nurses working group.

I'd like to wish all those undertaking post graduate study this year all the best. It's a real test of your time management, determination and drive to improve your own clinical practice. Your hard work will see growth in your knowledge and skills, as well as your critical thinking and approach to your patient care. You've got this!

Now please go forward and enjoy this edition of the Tube journal, please get in touch with the committee if you have any questions.

Merrilee Williams

Your Chairperson

NZGNC Secretary secretaryofnzgnc@gmail.com

Acute variceal bleed insights from Gastroenterology Conference 2023



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The Annual Scientific Meeting 2023, held at Energy Events Centre, Rotorua, provided a valuable opportunity to enhance my knowledge and skills in the field of gastroenterology. The conference featured knowledgeable speakers who shared insights into various topics, it gave me the opportunity to listen to the topics I was very interested in, including Endoscopic Mucosal Resection (EMR), Endoscopic Submucosal Dissection (ESD), Barrett's oesophagus and squamous cell carcinoma (SCC), oesophageal stenting, and notably, portal hypertensive bleeding.

Portal hypertension is defined as an increased pressure within the portal vein, it is a complication arising from liver cirrhosis (Iwakiri & Trebicka, 2021). It poses the risk of life-threatening acute variceal bleeding with an overall mortality rate of 12-20% (Khan et al., 2022). Varices are detected in 50% of cirrhosis patients (Maruyama & Yokosuka, 2012). Once varices manifest, there is a notable 20% overall incidence of variceal bleeding within a span of two years (Baignes et al., 2019).

The conventional management for treatment includes volume resuscitation, haemodynamic stabilisation, administration of vasoactive drugs such as Terlipressin, Somatostatin or analogs, and prophylactic administration of antibiotics. Together with gastroscopy and variceal band ligation (Khan et al., 2022). Over the years the mortality rate has significantly decreased because of the implementation of these interventional managements (Garcia-Tsao, 2016).

Endoscopic variceal band ligation is the primary therapeutic modality for oesophageal bleeding, its effectiveness can be limited in cases of massive bleeding. If the band ligation fails, rescue therapies such as the Sengstaken-Blakemore tube (SBT) and the SX-Danis stent can be used (Baignes et al., 2019).

The SBT is employed for uncontrolled oesophageal and gastric variceal bleeding, demonstrating a 90% bleeding control rate. However, it has significant complications such as oesophageal perforation, aspiration, and rebleeding (Currais et al., 2023).

The SX-Danis stent may also be utilised for bleeding control for refractory variceal bleed, boasting higher efficacy and fewer complications compared to the SBT. However, it

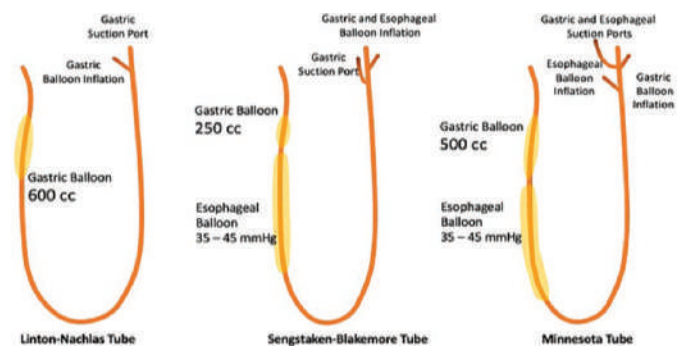


Fig.1 Self-expanding metal stent.

is not suitable for gastric variceal bleeding (Currais et al., 2023). The SX-Danis stent is a removable, fully covered self-expandable metal stent (SEMS), which proves very effective for bleeding from oesophageal varices. It has a 100% technical success rate, 87.5% bleeding control, and is relatively easy to use for refractory variceal bleeding (Khan et al., 2022). Additionally, its placement does not require endoscopic and X-ray control. It can be left in place for 7-14 days but then it must be removed to prevent oesophageal ulcerations.

After introduction of the insertion system into the upper gastrointestinal tract, the system is fixed against the mouth guard by removing the blue lock.

The remainder of the system is advanced until the white lock meets the sheath handle. The gastric balloon is inflated with 100 mL to 120 mL of air through the balloon port using a large-volume syringe. Traction is applied to the whole delivery system, anchoring it against the gastroesophageal junction and allowing appropriate positioning. To deploy the stent, the white lock is removed and while holding the distal end of the delivery system still, the sheath handle is pulled back until it reaches the distal extend of the delivery system. This deploys the stent and also deflates the gastric balloon. The stent can be deployed without a need for direct endoscopic or fluoroscopic guidance. The balloon port valve is unscrewed and removed to ensure the gastric balloon is deflated before removal of the delivery device. The SEMS has gold marked loops at the distal and proximal ends that can be used to

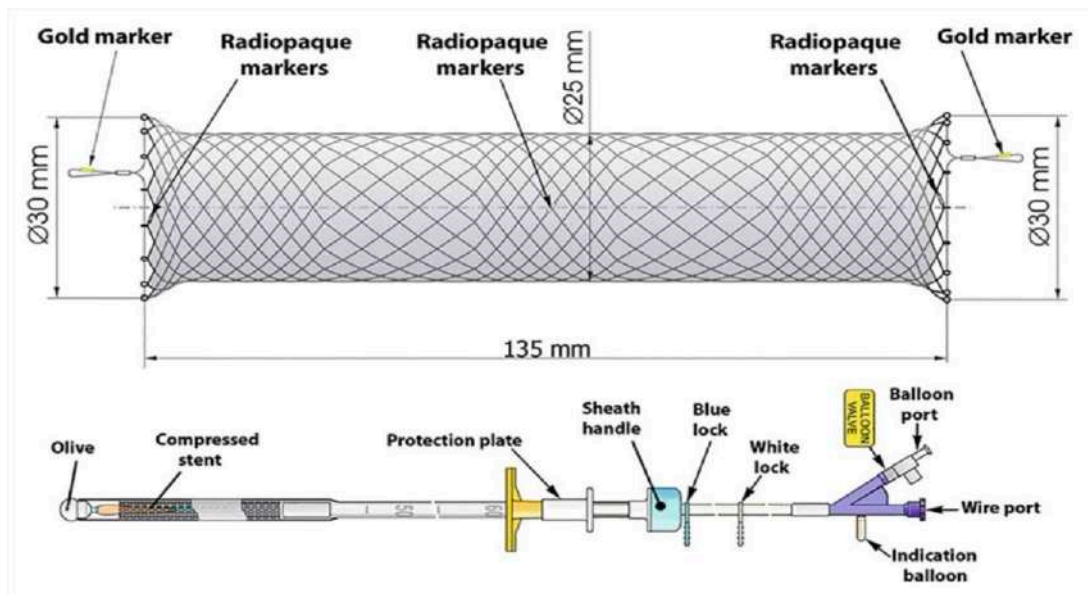


Fig.2 Novel insertion system

reposition or remove it, as well as radiopaque markers to confirm position on radiography. (Source: ELLA <http://ellacs.cz/en/danis-stent> (Leaflet – Danis Stent))

In summary, the SX-Danis stent is a great alternative to the SBT to control oesophageal variceal bleed and serve as a bridge to definitive therapies like Trans-jugular intrahepatic portosystemic shunt (TIPS). The SX-Danis has a high technical success rate, a lower complication rate, and is relatively easy to use. This makes it a preferable choice for nurses less familiar with the complexities of the SBT. As nurses, the stress associated with setting up and assisting during SBT placement necessitates continuous education. Refreshing ourselves through videos and manuals is crucial, and having a designated container for variceal bleeding would be beneficial for urgent situations. Notably, our unit in Hawke's Bay currently lacks the SX-Danis stent, highlighting the importance of having it readily available.

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Gastroenterological Nurses College of Australia *Education & Networking*



GENCA is hosting three Fundamentals of Endoscope Reprocessing Workshops in New Zealand in 2024 with Practical Skills available.

Details

Date: Friday 12th April 2024

Location: **CHRISTCHURCH**

Time: 8.30am to 4.00pm

Date: Friday 26th July 2024

Location: **AUCKLAND**

Time: 8.30am to 4.00pm

Date: Friday 9th August 2024

Location: **WELLINGTON**

Time: 8.30am to 4.00pm

What you will learn?

This is a foundation program that serves as an introduction to the reprocessing of flexible endoscopes incorporating infection control, structure and function, water filtration and workplace health and safety.

Registrations:

Can be made via the GENCA website or contact the GENCA office via email.

Simply visit the GENCA calendar to book your place at:
<https://www.genca.org/education/find-an-event/>

A limited number of practical skills assessments are available following each of the Fundamentals workshops.

Please complete the application form and submit to GENCA via fax on 1300 799 439 or via email to fundamentals@genca.org. Individual times for assessments will be sent via email once the registrations are processed.

What is 'Green Endoscopy' and how do we achieve it in NZ?

Andrea Dixon, Endoscopy Services Manager,
Ormiston Surgical & Endoscopy Ltd

Holly Weale, Registered Nurse, Waitaha
Canterbury.

Climate change has emerged as the most significant global threat of the 21st century, posing an existential risk to the world directly impacting human health by increasing diseases and deaths – but are we listening? Healthcare has contributed greatly to its development, and some countries have taken steps to address this crisis through decarbonisation, such as the NHS UK which aims to achieve net carbon zero by 2040 (greener.nhs, 2020). In Aotearoa, the transition to Te Whatu Ora signalled progress towards developing a national healthcare sustainability plan.

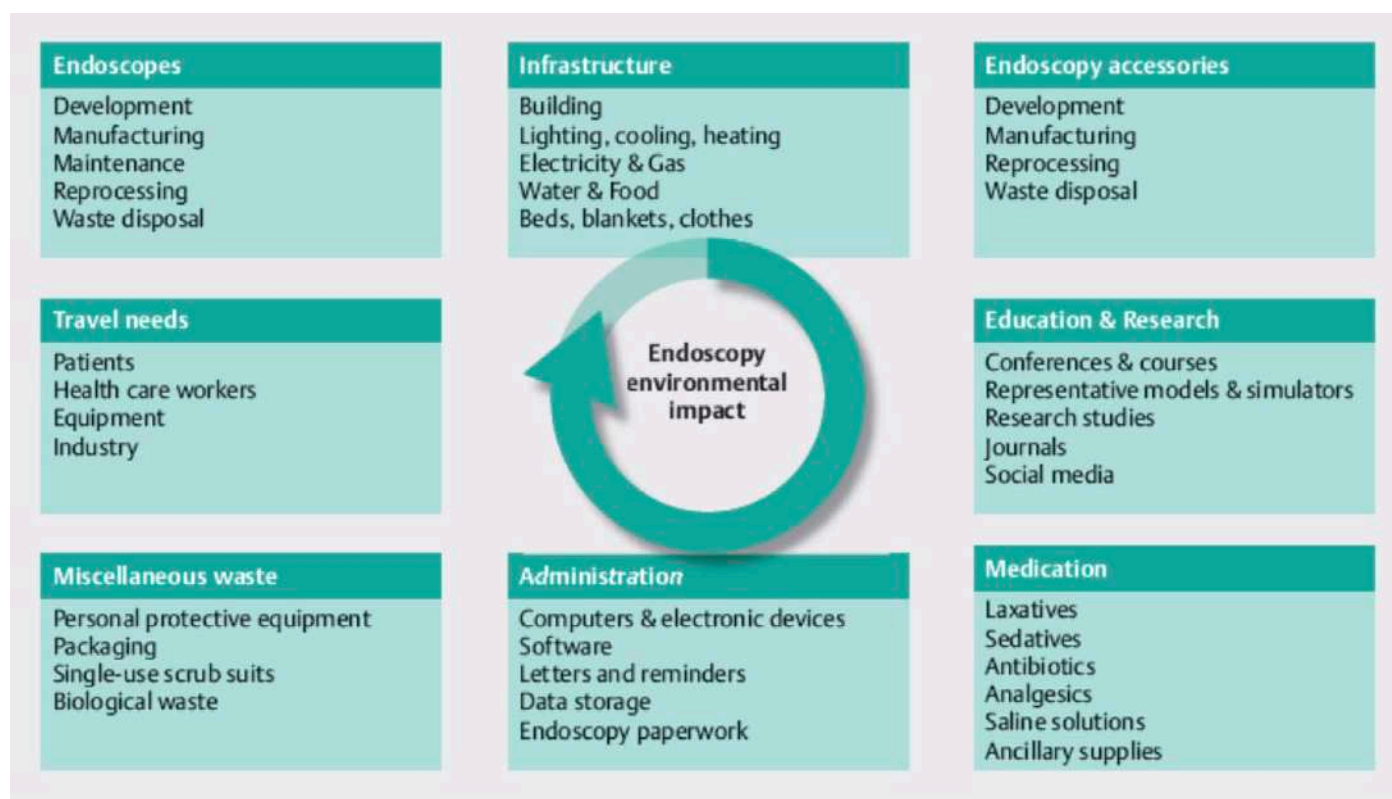
What does this mean for nurses working in endoscopy in NZ?

GI endoscopy has been recorded as the third highest waste generating procedure in healthcare facilities across the world. This is because of a high throughput of patients, multiple non-renewable waste streams, a resource heavy decontamination process and multiple hospital visits for some patients that includes travel (Cunha Neves et al., 2023; Donnelly, 2022; Park & Cha, 2023). The environmental impact of GI endoscopy can be seen in the diagram below:

In 2022, the NZSG established the Sustainability Working Group with a mission to promote sustainable practice in gastroenterology and endoscopy. The group conducted a survey among NZSG and NZgNC members at the end of 2022, receiving 40 responses.

While the number of respondents was low, they represented a diverse range of healthcare professionals, including public and private consultants, trainee registrars, endoscopy nurses, and representatives from various subspecialties with a wide variety of clinical experience post-qualification. An overwhelming majority (80%) expressed concern about climate change. Surprisingly, only 19% reported having received previous education on sustainability practices, despite the majority expressing a desire for further training. Additionally, 79% believed that the NZSG and NZgNC should prioritise environmental sustainability in gastroenterology and endoscopy (John, 2023).

Multiple frameworks have been developed demonstrating ways to reduce the carbon footprint in endoscopy units, including simple solutions such as powering down the unit when not in use and double-sided printing of patient reports (Sebastian et



► Fig. 1 The environmental impact of gastrointestinal (GI) endoscopy.

al., 2023). However, the major environmental impact caused by endoscopy procedures is the large volume of waste generated - such as plastic, packaging, and personal protective equipment (PPE) - and in the last decade there has been greater awareness of the environmental impacts caused by single use items (Agrawal et al., 2017; Desai et al., 2023).

Recycling seems a logical first step for units to start their green journey however, studies have shown that a low proportion of waste in endoscopy units is recycled (Azouz et al., 2019; Nambur et al., 2022; Petre et al., 2019).

Gayam (2020) estimates that only 0.3% of this waste is recyclable, and because recycle bins are not available in procedure rooms, virtually all waste from endoscopy procedures is going to end up in landfill. The move away from single use consumables such as plastic bowls, pottles and gowns, and replacing these with compostable alternatives is a relatively simple thing to implement with numerous compostable and biodegradable products now available.

On its own this is not going to have the desired effect of decreasing landfill and greenhouse gas (GHG) emissions as biodegradable products will break down eventually in landfill, but it will still take a long time due to it being an anaerobic environment with no dirt, microbes, fungi or bacteria (Earth Talk, 2023). A University of Arizona looked at landfill contents and discovered recognisable food items such as grapes and hotdogs and even a 25-year-old newspaper, the same will be happening with all the biodegradable rubbish per endoscopy day we are sending to landfill.

This is where commercial composting comes into play with most major centres now having collections and commercial composting facilities available.

Biodegradable waste breaks down within weeks and ends up as a fine fertile soil rather than filling landfills. The process is cleaner, faster, produces less GHG emissions than landfills and never fills up. It involves high temperatures to kill pathogens and bacteria but also provides an aerobic environment with organic matter and microbes which breaks down waste at high speeds.

Implementing this can be more challenging than adding a recycling bin to a room however in the long run is much more beneficial. It means a change in the way waste management on the hospital site is conducted with different bins next to landfill and recycling bins, however this doesn't mean needing more space due to the significant decrease in landfill waste that will occur. It means more than just the biodegradable pots and gowns but all food waste and paper towels which take up a lot of area in landfill bins.

It takes more effort to implement commercial composting, getting hospital facilities management on board, sourcing

appropriate bins for within the department and education, education, education for staff to ensure correct items are directed to the right bins. However once implemented and effectively managed it could quickly lead to a reduction in endoscopy waste going to landfill.

We need to start somewhere – the buzz words are the 3 'R's of a greener endoscopy – reduce, reuse and recycle. The ESGE offers tips for how to achieve these three, but also discusses two more 'R's in research and rethink. The term research in this case is affiliated with refuse – we should not be performing unnecessary GI endoscopic procedures and should be looking at the environmental impact non-endoscopic diagnostic alternatives could provide (ESGE, 2023).

It is estimated that 20-30% of endoscopies may be unnecessary (Frazzoni et al., 2021). In many talks about sustainability and green endoscopy the last slide is always that the largest impact on carbon emissions we can make is a reduction in GI endoscopic procedures – good triaging and not doing unnecessary procedures (Sebastian et al., 2023).

If an endoscopic procedure is deemed necessary, rationalising and limiting the number of biopsies / tissue samples sent for histopathology is urged, this can be done without compromising diagnosis and disease outcome (Ueda et al., 2023).

For example, a biopsy of the terminal ileum to confirm intubation is not required (EGGNZ, 2017). Ueda et al. (2023) also suggests the 'diagnose and leave' and 'resect and discard' strategies when diagnosing diminutive polyps (<5mm). Each sample in a pot sent to the laboratory increases GHG emissions for that procedure. Another idea is to follow up to date guidelines for polyp surveillance recommendations (as per the ESGE table below) which will help decrease the number of screening endoscopies performed each year.

Attributes of adenomas	USMTF (years, unless specified)	ESGE (years, unless specified)
0 in number	10	FIT or 10
1–2 in number	7–10	FIT or 10
3–4 in number	3–5	FIT or 10
5–10 in number	3	3
>10 in number	1	3
Any advanced adenoma (≥10 mm, high grade dysplasia, villous histology)	3	3
Piecemeal resection of adenoma (≥20 mm)	6 months	3–6 months

Continued over page

Post Polypectomy Surveillance Recommendations, 2020 (ESGE)

These are aspirational ideas to aim for but tomorrow what can you do in your endoscopy unit? A good way to start the introduction of 'green endoscopy' to your unit is the creation of a 'green team', a key theme in the literature (Azouz et al., 2019; Petre et al., 2019; Pohl, 2023; Sebastian et al., 2023; Wormer et al., 2013), and the first step towards staff buy-in. The green team is created with like-minded individuals, who can assess the attitudes of other staff, create a shared understanding of the meaning green, and provide information about waste segregation and sustainable principles (Azouz et al., 2019; Donnelly, 2022; Petre et al., 2019; Pohl, 2023; Sebastian et al., 2023).

And what can we focus on today, let's start by raising awareness amongst our teams, start with small steps such as using reusable cups, printing double sided and only when necessary, and sending reports to GPs electronically rather than a paper version (Donnelly, 2022). Thiel (2018) urges us to look at electricity usage stating that lighting and endoscopy processors in procedure rooms accounts for 10-30% of environmental impact (cited in Gayam, 2020).

A simple step would be to turn off monitors at the end of the day, switch off lighting between lists or extended breaks and at the end of the day, and even change to LED bulbs which use 60% less energy and will pay for themselves in approximately 2 months.

This article is the start of the conversation, let's work with the NZSG and the NZgNC and share our knowledge and resources. Let's as a specialty lobby industry to look at packaging requirements and say no to excess plastic. Get involved by contacting Daryl McGann or the authors of this articles to join together and save our planet.

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Cholestatic Liver Disease:

Primary Biliary Cholangitis (PBC); Part 1



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Introduction

The role of the hepatology nurse continues to evolve and expand, reflecting the ever-changing landscape of healthcare and the population it serves. With this has come the inclusion in nurse-led clinics of patients with cholestatic liver disease. Formally a domain of our medical colleagues, nurses are becoming more involved in the follow-up and monitoring of this patient group.

Primary Biliary Cholangitis (PBC) and Primary Sclerosing Cholangitis (PSC) are two such chronic cholestatic liver diseases that significantly impact patients' quality of life (Dyson et al, 2016). This article aims to provide a basic overview of PBC, including signs and symptoms, diagnostic approaches, and nursing care strategies based on current best practices and international guidelines.

Primary Biliary Cholangitis (PBC)

PBC is an inflammatory, autoimmune liver disease characterized by the progressive destruction of intrahepatic bile ducts (EASL, 2017). This condition is relatively uncommon and tends to affect middle-aged women (Bianchi et al, 2012). Common symptoms include fatigue, cholestatic pruritus, jaundice, sicca complex and abdominal discomfort (Mells et al, 2013). Cholestasis, a characteristic of PBC, affects lipids so patients may also have xanthoma (deposits of yellowish cholesterol-rich material under the skin) and xanthelasma (xanthoma on the eyelids) along with elevated cholesterol (Longo et al, 2002). Up to 25% of patients

with PBC may also have Raynaud's phenomenon (Watt et al, 2004). However, some patients are asymptomatic and only identified when routine blood tests show abnormal liver function tests (LFT), warranting further investigation.

Diagnosis

Diagnostic criteria include elevated alkaline phosphatase (ALP) levels, the presence of circulating antimitochondrial antibodies at a titre $\geq 1:40$ (AMA), PBC-specific antinuclear antibody (ANA) reactivity and cholestasis (EASL, 2017).

Whilst the trigger for PBC is not well understood, it is thought to be due to a combination of genetic risk factors and environmental triggers, for example: smoking, nail polish, urinary tract infections and hormone replacement therapy (Prince et al, 2010; Selmi et al, 2004). Injury to the bile ducts within the liver, caused by a complex interaction between the immune system and biliary pathway, causes a cycle of cholestasis, ductopenia and fibrosis (Juran & Lazaridis, 2014; Bianchi et al, 2014).

Advanced cases may lead to end-stage biliary cirrhosis and liver failure emphasizing the importance of early diagnosis and intervention (EASL, 2017). Because PBC does not change the morphology (size, shape and structure) of the liver, imaging is only useful to rule out liver neoplasms, extrahepatic causes of cholestasis and identify signs of advanced liver disease (EASL, 2017). Liver biopsy is required when PBC-specific antibodies are absent and/or autoimmune hepatitis (AIH) or metabolic dysfunction-associated steatotic liver disease (MASLD) are present (EASL, 2017).

Management

Management of PBC involves prescribing ursodeoxycholic acid (UDCA); a naturally occurring bile acid (American Association for the Study of Liver Diseases [AASLD] 2018). Optimal dosage is 13-15mg/kg/day, given either as a single dose or in divided doses (EASL, 2017). It has a high safety profile with minimal side effects (EASL, 2017). The response to this first-line therapy after six months (Zhang et al, 2013) determines if the disease is a 'high or low risk' disease (EASL, 2017), along with age of onset, gender, stage at presentation and biomarkers both pre/post UDCA (Trivedi et al, 2016).

Those with an inadequate response or intolerance of UDCA, may be prescribed Obeticholic acid (OCA) as well. The biomarkers ALP and bilirubin have been deemed internationally, as the most important parameters when evaluating the response to UDCA (Lammers et al, 2014). Fibrates (lipid-lowering medications) are

off-label alternatives that may be considered for patients with PBC that have responded inadequately to UCDA (AASLD, 2018).

Addressing symptoms like pruritus in PBC is paramount. Uncontrolled pruritus can lead to sleep disturbances and depression. Nursing interventions may include advising on cool baths, moisturizing with emollients and oatmeal extract to improve dry and inflamed skin (EASL, 2017), distraction therapy and pharmacological agents like bile sequestrants (cholestyramine), rifampicin, (a second-line agent), alternatively antihistamines, SSRIs or opiate antagonists (Kremer et al, 2012). Care around potential drug interactions is also necessary.

Management of fatigue, however, is more difficult as there are many potential variables. Developing healthy coping strategies and avoiding social isolation can be beneficial, provided alternative causes of fatigue have been addressed (EASL, 2017).

Sicca complex is characterised by dry mucous membranes: dry eyes (keratoconjunctivitis sicca)/or mouth (xerostomia), dysphagia or vaginal dryness, can be eased with artificial tears; stimulation of saliva production with sugar-free gum, mouthwashes, or saliva substitutes; and vaginal moisturisers. Pharmacological therapies may also be beneficial. Advice on oral hygiene is useful to prevent dental caries. Nurses must be cognizant of the emotional toll this chronic disease has on their patients and offer psychological support and referrals to appropriate resources, such as support groups or mental health professionals, when necessary or requested. Liver transplantation is effective for the treatment of debilitating pruritus unresponsive to medical treatment.

The goal of treatment is to manage symptoms and prevent end-stage liver disease (EASL, 2017). Regular assessments are essential to monitor disease progression. Assessment should include liver function tests 3-6 monthly, annual TSH, Vitamin A,D,E and PT if bilirubin >2.0mg/dl, and a baseline bone mineral density scan, then 2 yearly. Symptom evaluation, and nutritional status is also important. In PBC, monitoring pruritus severity and response to treatment is crucial. Additionally, assessing for complications such as portal hypertension or hepatocellular carcinoma in advanced cases.

Monitoring of PBC progression with vibration-controlled transient elastography (Fibroscan) is also recommended (EASL, 2017). Corpechot et al (2012) suggest that a liver stiffness measurement (LSM) greater than 9.6 kPa is associated with 5 times the risk of liver decompensation, liver transplantation or death. Hepatocellular surveillance is recommended for those with cirrhosis.

Educating patients on the importance of medication adherence, potential side effects, and the need for routine monitoring will empower patients with information about their condition, including triggers, symptom management, and the importance of follow-up appointments.

Conclusion

PBC is a complex cholestatic liver disease that requires comprehensive nursing care tailored to each individual patient. Early diagnosis, symptom management, and regular monitoring are crucial for improving patients' quality of life and long-term outcomes. Nurses play a vital role in educating, supporting, and empowering patients to manage this chronic condition effectively, ultimately enhancing their overall well-being and quality of life.

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**RŌPŪ TĀPUHI
HEPATOLOGY
O AOTEAROA**

**NZ HEPATOLOGY
NURSES GROUP**

Hepatology Nurses Update

February 2024

A highlight at the end of 2023 was the annual New Zealand Gastroenterology Scientific Meeting held in December. The day prior to Conference, the HZ hepatology Nurses Group Committee met to progress the key Knowledge and Skills Framework. The next step is to have it reviewed by the Society of Gastroenterology which is due to happen in the first quarter of this year.

The conference had some good hepatology content. One of the keynote speakers was Dr Guadalupe Garcia-Tsao, Professor of Medicine at Yale University School of Medicine.

Her research focuses on cirrhosis, portal hypertension and related complications, having authored over two hundred original research publications in addition to several society guidelines and position papers in the field.

She has also served as the President of the American Association for the Study of Liver Diseases in 2012 and many of us will have seen her name on journal papers over the years. It was a real honor to be able to attend the conference and her presentations were very engaging.

She reinforced the new guidelines for assessment of risk of clinically significant portal hypertension that we have adopted over the last year. It felt good to know that we are managing our patients in line with international best practice guidelines.

Dr Akilesh Swaminathan presented research on Metabolic Associated Steatotic Liver Disease (MASLD) which is increasingly relevant to our practice as hepatology nurses. Many will have worked with Akhilesh and appreciate his ability to convey technical information in a way that holds your attention. In summary cardio-metabolic risk is being under-treated in patients with MASLD and this is something we need to raise awareness about with our patients and their primary healthcare providers.

This year we are hoping to support more nurses to attend educational forums relevant to hepatology nursing and will be sharing more about this over the coming months. One of our committee members will also be attending the Genca National Conference in May as a trans-Tasman speaker.

She will be discussing hepatology nursing in New Zealand/Aotearoa with a focus on the evolution of our Knowledge and Skills Framework, and innovations in Hepatology Nursing here. This will be a great opportunity to strengthen our relationship with Australian hepatology nurses.

Please email Bridget Faire for any membership queries:
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Meckel's diverticulum seen in a capsule endoscopy, and an analysis of Meckel's diverticulum cases from 2012 – 2022 in Te Whatu Ora - Waitemata

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No financial disclosure.

Introduction

Patient MK, a 45-year-old male, presented in hospital for melaena. His haemoglobin dropped to 105 g/L, (130-175) and Ferritin 90 ug/L (N20-450). The patient had an Oesophagogastroduodenoscopy (OGD) and a colonoscopy, which both tests did not show any source of bleeding. This is considered as an obscure GI bleed (OGIB). OGIB is defined as bleeding from an unknown aetiology after negative endoscopy evaluations including OGD and colonoscopy with endoscopic evaluation of the terminal ileum. (Awatie, et al., 2022). A capsule endoscopy was then ordered as the next step in his investigations. Capsule Endoscopy is the procedure of choice of OGIB investigation due to its effectiveness and non-invasiveness (Tanabe, 2016).



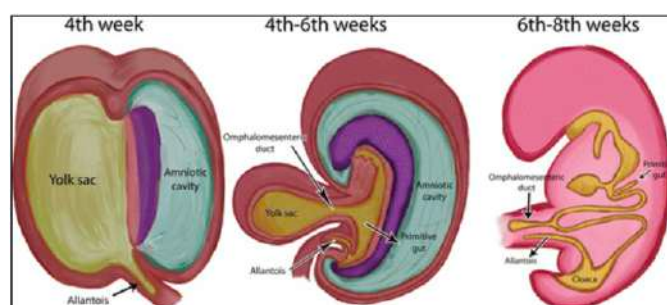
Figure 1: Capsule Endoscopy image of the Meckel's diverticulum

Capsule Endoscopy Findings

The patient then had a capsule endoscopy that showed an inflamed diverticulum in the distal small bowel (Figure 1). SB progress at 98%. The lead gastroenterologist, Ali Jafer, had a strong suspicion that the patient might have a bleeding Meckel's diverticulum. He called the patient and informed him of the situation. Later on, the patient had surgery and was confirmed that it was indeed, Meckel's Diverticulum.

Meckel's diverticulum

This is defined as a Congenital Malformation due to persistence of the congenital vitello-intestinal duct in which there is a failure of regression of the Omphalomesenteric duct during embryonic development. Ectopic gastric tissue can be present in the diverticulum. Majority of patients are asymptomatic. This is mostly diagnosed during surgery. Symptoms include obstruction or obstructive symptoms, GI bleeding, and inflammatory symptoms with or without perforation. (Sagar, et al., 2006).

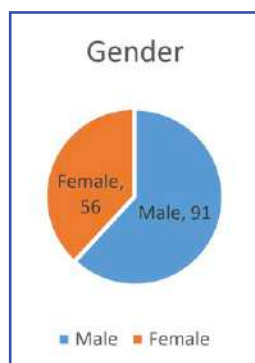
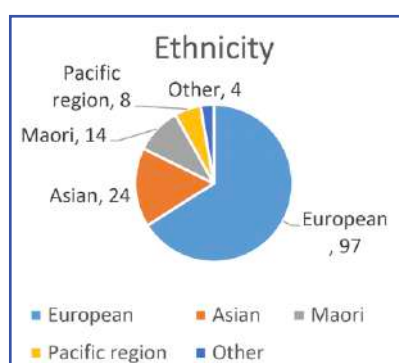
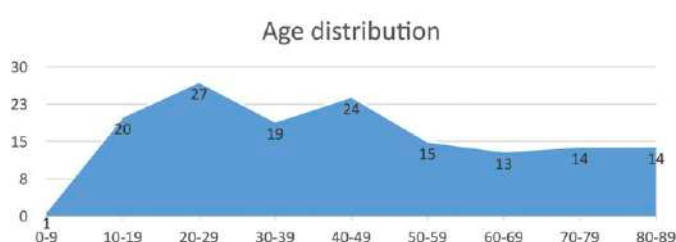


Data Review

The Research and Knowledge Centre of Te Whatu Ora - Waitemata provided the data used in the analysis. The criteria are that patients must be diagnosed with having Meckel's diverticulum post op or during discharge. 151 cases have been forwarded to me. I have omitted 4 cases as I could not find the findings of Meckel's diverticulum on their clinical portal.

Demographics.

I conducted a manual count of the data, revealing gender, ethnicity, and age distribution. There were 91 male patients and 56 female patients. The predominant ethnic group affected by Meckel's diverticulum is European, comprising 66% of the cases (97 cases). Asian individuals account for 16% (24 cases), followed by Maori at 9.4% (14 cases), the Pacific Region at 5.4% (8 cases), and other ethnicities at 3.2% (4 cases). Age distribution is as follows 0-9 = 1, 10-19 = 20, 20-29 = 27, 30-39 = 19, 40-49 = 24, 50-59 = 15, 60-69 = 13, 70-79 = 14, 80-89 = 14.



Method of Diagnosis

Of the 147 Meckel's cases, 121 of them have been diagnosed during a laparotomy. This is the list of surgeries done that they found Meckel's.

- Diagnostic/Explore laparotomy
- Lap appendectomy
- Whipple's
- Lap abdominoperineal resection
- Lap cholecystectomy
- Ileocolic resection
- Excision of mesenteric abscess
- Small bowel resection
- Resection to fix a perf
- Reversal of Hartman's
- Hernia repair
- LSCS
- Right hemicolectomy

- Duodenal switch
- Panproctocolectomy + formation of ileostomy
- Panproctocolectomy + ileocolonic resection
- Laparoscopy, proceed to laparotomy

For the remaining cases, 22 of them were confirmed in a CT scan, 2 cases were diagnosed via Gastric Meckel's scintigram, 1 case diagnosed by ultrasound, and 1 other case diagnosed by capsule endoscopy.

Conclusion

Over the past two decades, a total of 148 reported cases of Meckel's diverticulum have been observed, with a predominant impact on male patients of New Zealand European ethnicity. The age distribution reveals peaks in the 20-29 and 40-49 age groups, indicating its prevalence among both younger and middle-aged individuals. Notably, 82% of the cases are diagnosed through laparotomy, enabling prompt identification and removal upon visual confirmation, while others come to light incidentally or during investigations for unexplained bleeding.

Throughout 20 years of diagnosing Meckel's diverticulum, its visibility in a capsule endoscopy was a unique occurrence, highlighting its exceptional rarity in such diagnostic procedures and making that particular case especially remarkable.

This study aims to contribute valuable insights into the clinical characteristics of Meckel's diverticulum within our population, enhancing our understanding of this condition's impact in New Zealand.

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Inflammatory Bowel Disease Sub Specialty Group



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

Committee: Marian O'Connor (Chair), Kirsten Arnold (Co-chair), Nideen Visesio (Education lead), Donna Howe (Secretary)

Report Date: February 2024 **Prepared By:** Kirsten Arnold **Reporting Period:** Oct 2023 – Feb 2024

EDUCATION:

- The annual NZIBDNG education day is being planned for October and will be held in Auckland. Likely dates are 4-5 October (two half day sessions with an educational and networking dinner) but still TBC. Venue also TBC.

GENCA & IBDNA

- Carly Bramley is now living and working on the Gold Coast and is the acting chair of IBDNA.
- Nideen Visesio has replaced Carly Bramley as the education lead for this group. She and Carly will continue to work together to provide a valuable link for NZ nurses with the IBNA in Australia.
- Marian continues as a board director of GENCA and encourages you to avail of the reduced membership for kiwi's which provides access to online education and the national conference (planned for Brisbane in May 2024).
- GENCA IBD Foundation school dates are likely to be announced in March – details will be emailed to the group.

CALL TO ACTION / FOCUS GROUP

- The NZIBDNG Focus group has written to David Wait of the NZNO bargaining team to highlight issues that are facing IBD nurses. He is leading the group who are negotiating the senior nurse MECA with TWO and we have requested formal input into this process. David has acknowledged our letter and will provide an update following the negotiating group's next meeting, which is occurring in the last week of February.
- We want to collaborate with NZSG, CCNZ, and other interested stakeholders to address the issues with recruitment, and more importantly, retention of IBD nurses. CCNZ are keen to help and we are discussing a nationwide petition that can be delivered to parliament. Merrilee Williams is the chair of the NZgNC and she raised our concerns/issues at the recent NZgNC executive

committee meeting in Wellington. She was able to talk to the committee and representatives of Pharmac who were present, about the workload issues which have been further complicated by management of the new biologics.

- The focus group are collecting all workload data from units for the first quarter of 2024 (January to March). This information is vital for our efforts to highlight the lack of resource and FTE that impacts on our IBD nursing workforce in NZ.
- **Please, if you haven't already started collecting workload data (specifically patient helpline contacts - phone/email/text/face to face) then email our secretary Donna Howe who can provide you with the template for capturing data. Once you have collected the data for the first quarter, please pass that on to Donna. Her email is Donna.Howe@northlanddhhb.org.nz**

NZSG IBD MEDICATION WORKING GROUP

- This group continues to meet sporadically. Estella Johns, the current chair of the group, was able to discuss IBD medications with Pharmac representatives at the recent NZSG exec meeting. Special authority criteria and improving access to dose escalation were discussed. The group is pursuing funding for Upadacitinib, specifically for the group of patients in whom all funded biological therapies have failed to induce remission. Pharmac has asked for more information about the number of patients in this situation.

COMMITTEE

- The NZIBDNG committee continues to meet every 4-6 weeks virtually (via zoom), on your behalf and welcome contact from any new IBD nurse with any issues that you think need addressing

NZNEA Report

February 2024



New Zealand Nurse Endoscopists Association

The New Zealand Nurse Endoscopists Association (NZNEA) was formed and officially named in November last year, and a friend of co-chair Sofia Krylova-Smith very kindly donated their time to design our logo.

Currently, there are seven practicing Nurse Endoscopists (NE's) in NZ, with an additional one not currently practicing, and sadly another one just resigning from her role to pursue a career in primary care. While we are very sad to see Jacqui Fletcher leave her NE career behind, we wish her all the best in her endeavors in primary care. Also, a huge congratulations to Nicola Griffiths on passing her Nurse Practitioner exams. Our NE team now has five Nurse Practitioners and two Clinical Nurse Specialists.

December 2023 also saw our very first Nurse Endoscopists Study Day, which we plan on being an annual event. It was nicely timed for the day prior to the Annual Scientific Meeting and had a great turn out with six NE's and one NE trainee attending.

We were very privileged to have Helen Livett & Sharon Powell, two amazing NE's from the UK (called Clinical Endoscopists in the UK) to provide four hours of teaching on both endoscopy and non-endoscopy skills, including EMR technique, breaking bad news, and lesion recognition. We were also lucky enough to be able to spend time picking their brains on developing the NE role and training NE's, as Helen and Sharon are both senior clinical endoscopist trainers.

I would like to take this opportunity to thank Helen and Sharon for travelling all the way from the UK for such a very short amount of time, in order to support the progression of NE's in NZ. It was a great connection to make and I am sure will be invaluable in the future.

I would also like to say a big thank-you to Fresenius Kabi for their financial support in getting Helen and Sharon to NZ, and also to Pharmaco for sponsoring our afternoon tea at our meeting.

In the short time we have been formed, we have named our subgroup, developed a logo, appointed a small committee, and are in the process of designing a page for the NZgNC website to support Nurse Endoscopists and budding Nurse Endoscopist Trainee's in New Zealand.

A date is set for our next NZNEA zoom meeting, which we plan to have every quarter, and will be discussing issues such as how to train and support NE's in the future, and how to recruit more support to the role throughout the country.

We hope the formation of this group will strengthen the role of the Nurse Endoscopist in the New Zealand Health System and in future see the role grow and develop to its full potential.

Tania Waylen
Co-chair NZNEA

APPLICATION FORM

NZGNC EDUCATION GRANT

To be eligible for consideration of an education grant, you must have been a member of NZGNC for 12 months prior to applying. Consideration will be given to each application on its individual merits, however there is an annual budgeted limit to support our membership's professional development.

For full Post Graduate Paper funding: Priority will be given to first time applicants who meet the application criteria. If you are successful in your application for full funding, you will not be eligible to reapply for further funding for 24 months.

Please read all questions carefully and answer all sections fully, including endorsement from your manager. Failure to provide adequate information as requested may affect your application grant.

Grant funds can be used for any aspect of education requirements, including contributing to costs of papers, accommodation for meetings/conferences, and long-distance travel to meetings/conferences.

Awarded grants will be made once Tube article has been received from the applicant.

Applications will close at 5pm on advertised dates twice yearly. Late applications will not be accepted. All Grant decisions are the decisions of the Committee and are final.

Full Name:

Home Address:

Place of Employment:

Work Address:

Email Address:

Phone Number:

NZNO Membership Number:

Applications close 1st March and 1st September each year.

The maximum amount of funding allocated:

National Education – NZD \$800.00 (reimbursed)

International Education – NZD \$1,800.00 (reimbursed)

Post Graduate Education – up to 100% of the course fee

Please complete & email this application to: secretaryofnzgnc@gmail.com

Please ensure you answer all questions marked with a * You must complete the mandatory questions.
It is helpful for you to supply as much information as possible to support your application for the education grant.

1	* Are you a financial member of NZNO <u>and</u> have been a member of NZGNC for more than 12 months?	<input type="radio"/> YES	<input type="radio"/> NO
2	* Please indicate the number of years you have been a NZGNC member (must be more than 12mths membership period)	----- YEARS	
3	* Have you ever presented at a National or Local meeting? If yes, please <u>include</u> evidence of your presentation/s with your application	<input type="radio"/> YES	<input type="radio"/> NO
4	* How many NZGNC National meetings have you attended in the last 2 years? If yes, please <u>include</u> evidence of your attendance at these meetings with your application	<input type="radio"/> 0	<input type="radio"/> 1 <input type="radio"/> 2
5	Have you held an official NZGNC Term of Office? If yes, what position was held? ----- And for how many years? -----	<input type="radio"/> YES	<input type="radio"/> NO
6	Have you contributed to The Tube? If yes, please provide details of the edition your contribution was in: -----	<input type="radio"/> YES	<input type="radio"/> NO
7	If you are an endoscopy nurse, have you completed the GENCA web-based Endoscope Reprocessing Training package? https://www.genca.org/education/endoscope-reprocessing-modules/ Please <u>include</u> Certificate of completion with your application	<input type="radio"/> YES	<input type="radio"/> NO
8	* Have you received funding from NZGNC in the last 2 years? If yes, please complete: Month, Year & amount granted: ----- Please <u>include</u> evidence of previous NZGNC grant/s received with your application	<input type="radio"/> YES	<input type="radio"/> NO
9	<p>* Please indicate the grant you are applying for. One grant is given per applicant; however, you can apply for more than one education event by rating your preference 1 – 4</p> <p>1 Choose an item. Educational study – please provide the course name and date of completion: 2 Choose an item. 3 Choose an item. ----- 4 Choose an item.</p>		
10	* If the education event for which you are seeking funding is not undertaken, do you agree to notify NZGNC in writing and that the money received by you from the Gastroenterology Education fund will be returned?	<input type="radio"/> YES	<input type="radio"/> NO
11	<p>* Do you agree to submit a final report from the education event to the committee and the Editor of 'The Tube' within 6 weeks of the planned education event and as outlined in the application approval letter?</p> <p>IMPORTANT: By agreeing to this, it should be understood that this report will comply with the guidelines for "writing for publication in The Tube". This report should have approximately 1000 words.</p>		

Please ensure you answer all questions marked with a * You must complete the mandatory questions.
It is helpful for you to supply as much information as possible to support your application for the education grant.

12	* Professional (Nursing) Qualifications:	----- ----- -----
13	* Provide an outline of your current involvement in Gastroenterology	----- ----- -----
14	* Education event you require the grant for: Please <i>include</i> a copy of the programme <input type="radio"/> Programme not published	----- ----- -----
15	* Education date/s:	----- ----- -----
16	* Are you likely to receive any other funding for this education? If yes, who from & how much?	<input type="radio"/> YES <input type="radio"/> NO ----- ----- -----
17	* Give a brief description of the purpose of attending this education:	----- ----- -----
18	* State the benefits you perceive as a consequence of attending the Education event (For yourself, colleagues, nursing/health services)	----- ----- -----
19	* Projected Education costs:	• Registration fee: \$----- • Travel/Accommodation: \$----- • Total requested: \$-----
20	Any additional comments, in support of your application:	----- ----- ----- -----
Applicant's signature: _____		Date: _____

*Manager Endorsement of Application - this section must be completed		
Do you support this application for Education Grant from NZGNC	<input type="radio"/> YES <input type="radio"/> NO	
Applicant's PDRP Level:	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	
How is the applicant attending this education event going to benefit your department?	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	
Name: (please print)	Signature:	Date:
_____	_____	_____

INFORMATION FOR APPLICANTS:

PURPOSE:

To provide financial assistance for New Zealand Registered, Health Care Professionals to attend Education within New Zealand or Overseas, relevant to the Gastroenterology Nursing profession.

CONDITIONS FOR APPLICATION:

The applicant:

1. Is a Health Care Professional working within Gastroenterology in New Zealand.
2. Is a member of NZNO and has been a member of the Gastroenterology Nurses' College for a minimum of twelve (12) months.
3. Has not received full PG paper funding in year previous.
4. Is undertaking the education within a year of award being made.
5. Will complete a report and have it published in 'The Tube' once education completed.
6. Understands that failure to submit their article within 6 weeks of completing the event for which funding is approved, will make this application null and void. Grant will be paid to applicant on receipt of article.
7. You must advise the NZgNC committee if you do not successfully complete the academic criteria required to pass. You may be required to repay the funding grant should there not be a reasonable consideration to explain why you have not met the academic the requirements.

THE APPLICANT IS ASSESSED ON:

1. Professional activities.
2. Relevance of planned travel to practice.
3. Benefits for nursing service especially for Gastroenterology.
4. Nursing background.
5. Presentation of application.
6. Amount of funding requested equitably fits within the annual budgeted amount for NZgNC education fund

TO COMPLY WITH THE PRIVACY CODE: ALL INFORMATION REGARDING YOUR APPLICATION WILL BE CONFIDENTIAL TO THE NZNO GASTROENTEROLOGY NURSES' COLLEGE NATIONAL COMMITTEE AND THE JUDGES.

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:

Title Page

- Title of the Paper (20 word max)
- Author(s) name(s) in full
- Qualifications, current position, details of other relevant achievements, and affiliations of author(s)
- Address, contact telephone numbers, email address of the author(s)
- Conflict of interest and / or financial disclosure related to the article or related matter

Body of article

- Title at top of first page
- The body of work should be clearly written in an academic style of writing, and organised with headings/sub-headings (where appropriate)
- Pages numbered consecutively
- Tables, figures (if applicable) should be referred to in the body of the manuscript
- References (APA 6th Edition)
- Written authorisation(s) to publish identifiable person(s)/ institutions and copyright materials

Word limit is approximately 1000 words. For the purposes of publication all articles should be formatted in Calibri, font size 10. All work should be saved as MS-Word (.docx) or text only (.txt) files.

All articles must be fully referenced where appropriate (APA 6th Ed)

Authors should keep an original copy of their article.

SUBMISSION

Articles should be submitted to the editor at NZGNC Secretary secretaryofnzgnc@gmail.com .

If submission of your article is as a requirement of a NZgNC Education/Travel Grant, please ensure you submit within the required 6 week timeframe of your funding application.

REQUEST FURTHER INFORMATION

For advice or clarification on any of the above matters please contact the NZGNC Secretary secretaryofnzgnc@gmail.com

COLLEGE COMMITTEE MEMBERS' REPORTS:

The aim of such reports is to inform the national College membership of the business and activities of the College during the last quarter.

These reports should include such activities as:

- College meetings/teleconferences (date and venue)
- Decisions arising from these meetings/teleconferences (can be focused on the minutes of these meetings)
- Plans/development the College is involved in/hopes to develop
- Any external meetings committee members have attended relating to the business of the College, e.g. meetings with NZNO professional nursing adviser/professional services manager
- Any contributions to national NZNO business, e.g. contribution to any submissions/ national guideline development

These should be a maximum of 600 words and contain people's correct names and titles.

CASE STUDY/CLINICAL PRACTICE ARTICLE:

- Outline the nature of the treatment/procedure/product that forms the basis of the case study
- Provide information on the patient: age, sex, history, any other pertinent clinical/social/cultural aspects. Avoid using information, which would clearly identify the patient.
- Tell readers what is new, interesting, different, pioneering, about this treatment/procedure/product
- Outline the actual treatment/procedure or how product works
- Report on the patient's/client's response/recovery/
- Tell readers what you have learnt through your involvement with this treatment/procedure/product
- Outline any implications/meaning it may have for gastroenterology nurses' practice
- Provide references to support the article.

GASTROENTEROLOGY UNITS IN NEW ZEALAND

ASHBURTON HOSPITAL Operating Theatre Endoscopy Unit Private Bag 801, Ashburton Ph: 03 308 4149 CNC: Rachel.McEwan@cdhb.health.nz	AUCKLAND HOSPITAL Gastroenterology Department Level 6 Private Bag 92024, Grafton, Auckland Ph: 09 307 4949 ext: 125570 CNM: cristinag@adhb.govt.nz	AUCKLAND SURGICAL CENTRE 9 St Marks Road, Remuera Auckland 1050 Theatre Mgr: Tracy McConnochie
BELVERDALE HOSPITAL Endoscopy 5 Campbell Street, Wanganui Ph: 06 348 1182 Donna Plumridge manager@belverdale.co.nz	BIDWELL HOSPITAL Endoscopy Unit 53 Elizabeth Street, Timaru 7910 Ph: 03 687 1230 Operating Theatre Bidwill Trust Hospital Ph: 03 687 1230 ext 225 DD 03 687 1245 Rachel Pilgrim: theatre@bidwilltrusthospital.co.nz Carol Campbell: clinicalleader@bidwillhospital.co.nz	BOWEN HOSPITAL Gastroenterology Department 98 Churchill Downs, Wellington Ph: 04 479 8261 endo@bowen.co.nz
BRAEMAR HOSPITAL Endoscopy Unit PO Box 972, Hamilton Ph: 07 839 1899 nicolaw@braemarhospital.co.nz stuartm@braemarhospital.co.nz	BRIGHTSIDE 3 Brightside Road Epsom, Auckland 1023 Ph: 09 925 4200 Theatre Mgr: John Drinkwater	CAMBRIDGE SPECIALIST CENTRE 21 Hamilton Road, Cambridge 3434 edeere@cambridgespecialists.co.nz afyers@cambridgespecialists.co.nz
CHARITY HOSPITAL Endoscopy, 349 Harewood Road, Christchurch Ph: 03 360 2266 Anita Tuck: anita@ccht.org.nz	CHELSEA HOSPITAL Endoscopy Unit 189 Cobden Street, Gisborne Ph: 06 867 2237	CHRISTCHURCH HOSPITAL Gastroenterology Department PO Box 4710, Christchurch Ph: 03 364 0925 Gendy.bradford@cdhb.health.nz
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GILLIES HOSPITAL 160 Gillies Ave, Epsom Auckland 1023 Ph: 09 925 4000 OR Mgr: Carol Burnside	GISBORNE/ TAIRAWHITI 421 Ormond Road, Gisborne 4010 Endoscopy Clinical Nurse Co-ordinator: Sue Egan-Cunningham Ph: 06 869 0500 ext. 8320 or 021 346 024 Susanne.egan-cunningham@tdh.org.nz	GRACE HOSPITAL Endoscopy Room 281 Cheyne Road, Tauranga 3112 PO Box 2320, Tauranga 3140 sarahha@gracehospital.co.nz endoscopy@gracehospital.co.nz
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HUTT HOSPITAL Endoscopy Unit Private Bag 31 907 Lower Hutt, Wellington Ph: 04 566 6999 Marie.press@huttvalleydhd.org.nz	INTUS DIGESTIVE AND COLORECTAL CARE Milford Chambers, St Georges Medical Centre 249 Papanui Road, Christchurch Ph: 03 977 5977 nurses@intus.co.nz	INTUS WANAKA & QUEENSTOWN Kate.lawrence@intus.co.nz

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NORTH SHORE HOSPITAL Endoscopy Department Private Bag 93503 Takapuna, Auckland Ph: 021 192 9825 Kate.Grigg@waitematadhub.govt.nz	ORMISTON HOSPITAL 125 Ormiston Road, Flat Bush, Howick Manakau City 2016 PO Box 38921, Manakau City, Auckland 2145 Ph: 09 250 1157 ext: 5818 suzannec@ormistonhospital.co.nz	ORMISTON HOSPITAL Level 3, 125 Ormiston Road, Botany Junction, Auckland Andrea.Dixon@ormistonhospital.co.nz
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Advertising Rate Card

THE Tube Panui

NZgNC
NZNO GASTROENTEROLOGY
NURSES' COLLEGE

**NEW ZEALAND
NURSES
ORGANISATION**

The NZgNC is the national voice for gastroenterology nursing practice in NZ, and works collaboratively with the NZSG, and international societies such as GENCA and BSG. We represent nurses working in endoscopy, Hepatology, Inflammatory Bowel Diseases, Enteral Feeding, and Nurse Endoscopists.

We have 2 e-publications that are sent to our membership of nearly 500 nurses



The **TUBE e-magazine** is the official journal of the NZNO Gastroenterology Nurses College and is published twice yearly. It features scholarly articles on all aspects of gastroenterological nursing including current research, education opportunities, reports from conferences, case studies, new medications and products, infection control and updates in clinical practice.



The **PANUI newsletter** is new for 2023 and is published 6 x per year. It is designed to be a snapshot update for our membership to print and place in their workplaces to keep teams up to date with education and learning opportunities coming up, clinical practice news, and general gastroenterology focussed news.

We welcome sponsor contributions to nursing education for Gastroenterology Nurses through advertising in our publications

Advertising Rates 2023

THE TUBE	
A4 Full Page 210mm wide x 297mm high	\$550 inc GST
A4 Half Page 180mm wide x 120mm high	\$275 inc GST

Content deadlines for publication inclusions

February Edition	Due: 3rd Feb
October Edition	Due: 3rd Sept

PANUI	
Live link logo To sponsor education content	\$150 inc GST
Sponsor Corner 80 x 80mm with live link to sponsor	\$200 inc GST

Content deadlines for publication inclusions

January, March, May, July, September, December	Due on the 1st of each month prior ie. Due 1st Dec for Jan edition
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Acceptance of advertising requests is subject to approval by the NZgNC committee, and required by the deadline for publishing.

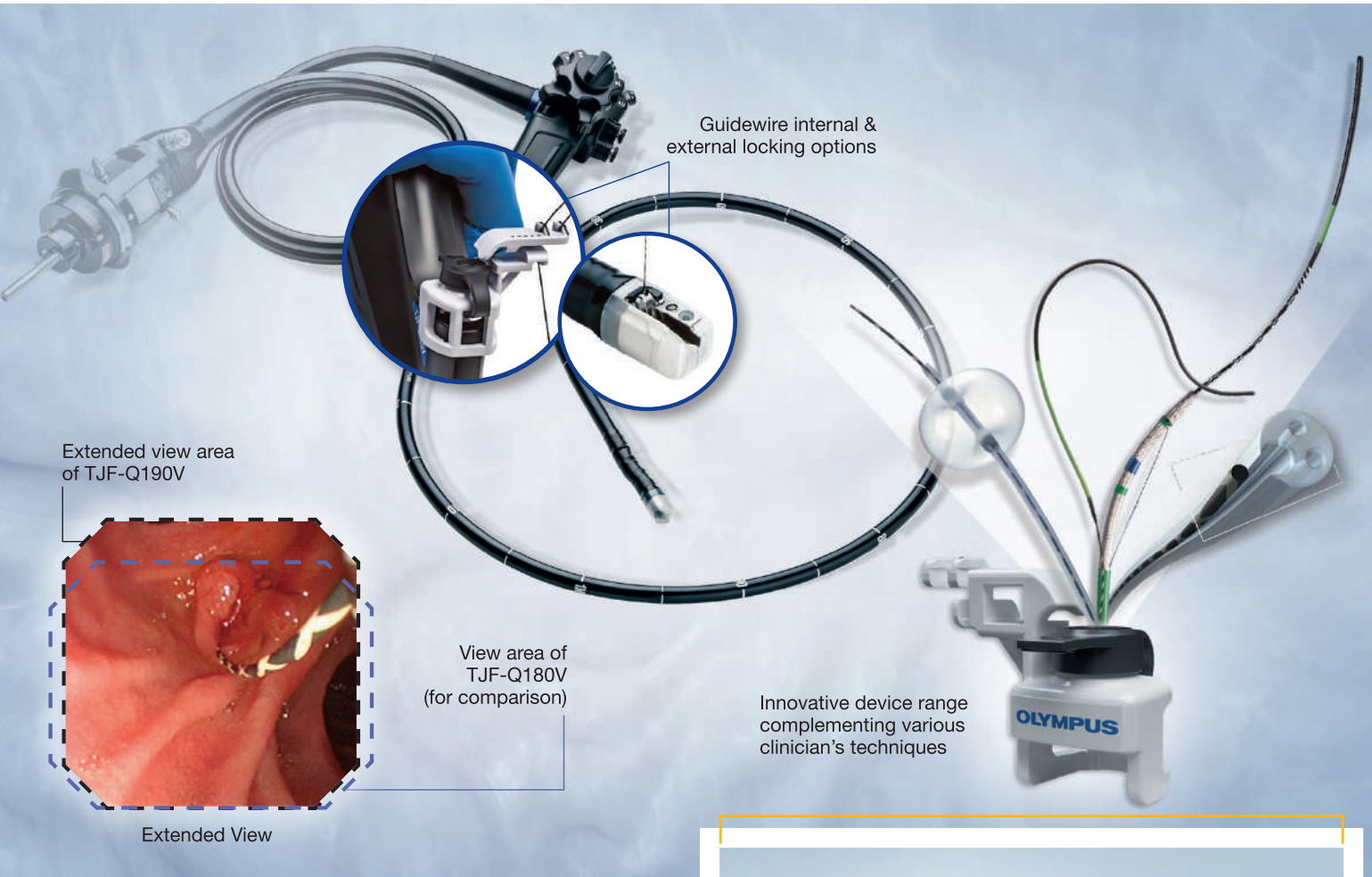
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