CANNT JOURNAL
JOURNAL ACITN

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Exploring the option of peritoneal dialysis for patients with a left ventricular assistive device

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Canadian Association of Nephrology Nurses and Technologists
l'Association canadienne des infirmières et infirmiers et des technologues de néphrologie

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Editor-in-Chief
Jovina Bachynski, MN, RN(EC), CNeph(C), PhD(Student)
Email: cannt.journal1@gmail.com

Co-Editor
Rosa M. Marticorena, BScN, RN, CNS, CNeph(C), DClinEpi, PhD
Email: cannt.journal1@gmail.com

Managing Editor
Heather Coughlin, Pembroke, Ontario

Layout and Design
Sherri Keller, Pembroke, Ontario

Advertising Sales
Heather Coughlin, Pappin Communications
T: (613) 633-1938
Email: heather@pappin.com
Rate card: www.pappin.com

Letter from the Editors

This year's theme for World Kidney Day (March 9, 2023) was *Kidney Health for All – Preparing for the Unexpected and Supporting the Vulnerable*. This is a very compelling message to heed for all of us involved in providing compassionate and holistic kidney care to our vulnerable patients, particularly at a time when we are finally, but cautiously, coming out of the shadow of the pandemic. Let us take a moment to recognize the importance of kidney health and the impact of chronic kidney disease as a major public health concern, affecting millions of people globally and contributing to significant morbidity and mortality rates.

At the *CANNT Journal*, we recognize the critical role that nurses and other healthcare professionals play in the care of patients with kidney disease. Nurses are at the forefront of patient care and provide essential support and education to patients and their families. We recognize and honour the tireless dedication of nephrology nurses who provide critical care and support to dialysis patients. Your compassion, expertise, and unwavering commitment to your patients' well-being are truly remarkable. The challenges that come with kidney disease and dialysis can be overwhelming, but you are there to provide comfort, guidance, and hope every step of the way.

Let us all commit to working towards a world where kidney disease is no longer a silent epidemic, and everyone has the opportunity to live a healthy life. We hope that the articles published in the CANNT Journal will contribute to the ongoing efforts to improve kidney health and care for patients with kidney disease.

In this journal issue, we present the article *Exploring the option of peritoneal dialysis for patients with a left ventricular assistive device* by Anna Gozdzik. The author presents guidance to provide care to complex nephrology patients with left ventricular assisted device (LVAD).

We invite all our members to consider submitting manuscripts about topics in nephrology nursing and technological practice that the entire nephrology community might benefit from. We publish observational studies, clinical trials, case reports, solutions to clinical bedside problems, and quality improvement projects in order to advance our collective nephrology practice. The *CANNT Journal* is a powerful platform to showcase your literary and practice contributions locally, nationally, and internationally. We look forward to meeting you in person in the CANNT Conference in PEI.

Sincerely from your *CANNT Journal* co-editors,

Jovina Bachynski
MN-NP Adult, RN(EC), CNeph(C), PhD Student

Rosa M. Marticorena
CNS, CNeph(C), DClinEpi, PhD

Message des rédactrices en chef

Le thème de la Journée mondiale du rein de 2023, célébrée le 9 mars, était « La santé rénale pour tous – se préparer à l'inattendu, soutenir les personnes vulnérables. » Il s'agit d'un message très convaincant pour tous ceux et celles d'entre nous qui fournissent avec compassion des soins rénaux holistiques aux patients vulnérables, en particulier au moment où nous sortons enfin, mais prudemment, de l'ombre de la pandémie. Prenons un moment pour prendre conscience de l'importance de la santé rénale et des répercussions de l'insuffisance rénale chronique en tant que problème majeur de santé publique. En effet, cette maladie touche des millions de personnes dans le monde et contribue de façon significative à l'augmentation des taux de morbidité et de mortalité.

À la *Revue de l'ACITN,* nous reconnaissons le rôle essentiel du personnel infirmier et des autres professionnels de la santé dans les soins prodigués aux patients atteints d'une maladie rénale. Le personnel infirmier joue un rôle de premier plan dans les soins aux patients, apportant à ces derniers ainsi qu'aux membres de leur famille un soutien et des connaissances essentiels. Nous reconnaissons et honorons le dévouement inlassable des infirmières et infirmiers en néphrologie qui fournissent des soins et un soutien critiques aux patients sous dialyse. Votre bienveillance, votre expertise et votre engagement inébranlable envers le bien-être de vos patients sont vraiment remarquables. Les défis liés aux maladies rénales et à la dialyse peuvent être accablants pour les patients, mais à chaque étape du parcours, vous savez les réconforter, les conseiller et leur donner de l'espoir.

Travaillons tous ensemble pour créer un monde où les maladies rénales ne sont plus une épidémie silencieuse et où chacun a la possibilité de vivre en santé. Nous espérons que les articles publiés dans la *Revue de l'ACITN* contribueront aux efforts actuels visant à améliorer les soins aux patients atteints de maladies rénales.

Dans ce numéro, nous vous présentons l'article intitulé *Exploring the option of peritoneal dialysis for patients with a left ventricular assistive device,* dans lequel l'auteure (Anna Gozdzik) fournit des conseils relatifs aux soins des cas complexes de maladies rénales chez les patients ayant un dispositif d'assistance ventriculaire gauche (DAVG).

Nous encourageons tous nos membres à soumettre des manuscrits traitant de soins infirmiers ou de pratiques technologiques en néphrologie dont l'ensemble de la communauté des soins rénaux pourrait bénéficier. Nous publions des articles sur des études observationnelles, des essais cliniques, des études de cas, des solutions à des problèmes cliniques et des projets d'amélioration de la qualité afin de faire avancer notre pratique collective en néphrologie. La *Revue de l'ACITN* est une plateforme formidable pour mettre en valeur vos publications et votre pratique aux échelles locale, nationale et internationale. Nous espérons vous voir en personne au congrès annuel de l'ACITN, qui se tiendra à l'Île-du-Prince-Édouard.

Salutations cordiales de la part des rédactrices de la *Revue de l'ACITN*,

Jovina Bachynski
Sc. inf., IP (adulte), inf. aut. (catégorie spécialisée), CNeph(C), doctorante

Rosa M. Marticorena
ICS, CNeph(C), D.E.S. Épidémiologie clinique, Ph. D.

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Téléphone : 613-507-6053
Télécopieur : 1-866-303-0626
Courriel : cannt@cannt.ca

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Le *Journal ACITN* accepte des articles (manuscrits) de façon continue.

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Rédactrice en chef
Jovina Bachynski, MN, RN(EC), CNeph(C), PhD(Student)
Courriel : cannt.journal1@gmail.com

Co-rédactrice
Rosa M. Marticorena, BScN, RN, CNS, CNeph(C), DClinEpi, PhD
Courriel : cannt.journal1@gmail.com

Éditeur
Heather Coughlin, Pembroke (Ontario)

Conception et design
Sherri Keller, Pembroke (Ontario)

Publicité
Heather Coughlin, Pappin Communications,
T : 613-633-1938
Courriel : heather@pappin.com
Publicité : www.pappin.com

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cannt@cannt.ca

CANNT Journal Editor-In-Chief/ Rédactrice en chef:
Jovina Bachynski, MN, RN(EC), CNeph(C), PhD(Student)
cannt.journal1@gmail.com

CANNT Journal Co-Editor/ Coéditrice:
Rosa Marticorena, BScN, RN, CNS, CNeph(C), DClinEpi, PhD
cannt.journal1@gmail.com

CANNT Administrative Office/ Bureau National de l'ACITN:
4 Cataraqui St., Suite 310
Kingston, ON K7K 1Z7
Phone: 613-507-6053
Same Toll Free: 1-877-720-2819
Fax: 1-866-303-0626
General email: cannt@cannt.ca

President's Message

It is hard to believe that it is 2023 and I am entering my final year as your president. It is an honour to serve and a pleasure to volunteer with such a great group of like-minded colleagues on our executive board. Their passion and commitment to CANNT make it very easy to work collaboratively to achieve our goals. I urge you to become involved with CANNT, as the personal benefits are just as numerous as the professional. You have an opportunity of not only improving the lives of our patients and promoting excellence in nephrology nursing, but also growing your career and increasing your self-fulfillment. For more detailed information on all the additional benefits of membership, please visit our website. You will also have the support and guidance of our Events Management Plus team who have been instrumental in keeping our organization moving forward. Please consider becoming part of our national association by running for office and contacting your regional VP or our national office.

Here at CANNT we are continuing to provide our monthly webinars, and for those who may have missed any, please visit the recorded sessions on our website. These sessions were very well attended and I thank you for your dedication to lifelong learning. Also, I want to remind members of the CANNT survey that is coming soon to gather more information on your needs. Please take the time to complete it, as your feedback is necessary in developing upcoming webinar topics.

I must also promote our Canadian Certification in Nephrology Nursing, which is offered through the Canadian Nurses Association. This may be one of your New Year's resolutions and a professional goal, and I challenge you to follow through on it. Please visit the CNA website to register for the next exam and then come to the CANNT website for all your educational resources to guarantee your success. Your interest in furthering your knowledge shows your dedication to your profession and patient care. Please do not hesitate to contact your VP or the national office if you have any concerns or questions.

I want to end this report with a reminder of our annual national conference being held in PEI in October 2023. Preparations are already well underway and a call for abstracts is being advertised. I want to give a big shout out to the planning committee, and I want all members to plan on attending this worthwhile event. As a past president once said, CANNT is only as strong and viable as its members and that is you. Together we can keep CANNT providing leadership and promoting the best nephrology care and practice through education, research, and communication. Please stay a member and promote membership in your work areas and with your professional colleagues.

Respectfully submitted,

Cathy Cake, M.Ed., BN, RN, CNeph(C)
CANNT President 2021–2023

Message de la présidente

Il est difficile de croire que nous sommes déjà en 2023 et que j'entame ma dernière année en tant que présidente. C'est un honneur de servir l'ACITN, et un plaisir de faire du bénévolat au sein du conseil d'administration avec un groupe aussi formidable de collègues aux vues similaires. Leur passion et leur engagement à l'égard de l'ACITN font qu'il est très facile de collaborer à l'atteinte de nos objectifs. Je vous invite à vous engager au sein de l'ACITN, car les avantages personnels sont tout aussi nombreux que les avantages professionnels. Vous avez la possibilité non seulement d'améliorer la vie des patients et de promouvoir l'excellence dans le domaine des soins infirmiers en néphrologie, mais aussi de faire progresser votre carrière et de vous épanouir. Pour de plus amples renseignements sur les nombreux avantages de l'adhésion, veuillez consulter notre site Web. Vous bénéficierez aussi du soutien et des conseils de l'équipe d'Events Management Plus, qui a joué un rôle déterminant dans l'évolution de notre organisation. Je vous encourage donc à vous joindre à notre association nationale en vous présentant aux élections ou en contactant la vice-présidente régionale ou le bureau national si vous avez des questions.

Par ailleurs, j'aimerais souligner que nous continuerons à proposer des webinaires mensuels. Pour ceux qui en auraient manqué un, les enregistrements sont accessibles sur le site Web. La participation à ces webinaires a d'ailleurs été excellente et j'en profite pour vous remercier de votre dévouement en ce qui concerne la formation continue. Je tiens également à mentionner que nous lancerons prochainement le sondage de l'ACITN, qui vise à recueillir plus de renseignements sur les besoins de nos membres. Veuillez prendre le temps d'y répondre, car vos commentaires sont nécessaires pour choisir les thèmes des prochains webinaires.

Je me dois également de promouvoir la certification canadienne de soins infirmiers en néphrologie, qui est offerte par l'Association des infirmières et infirmiers du Canada (AIIC). L'obtention de la certification fait peut-être partie de vos résolutions du Nouvel An ou de vos objectifs professionnels, et je vous encourage à mener ce projet à terme. Vous pouvez vous inscrire au prochain examen sur le site Web de l'AIIC et vous trouverez sur le site Web de l'ACITN toutes les ressources éducatives nécessaires à votre réussite. Je salue l'intérêt que vous portez à l'approfondissement de vos connaissances, qui témoigne de votre dévouement envers votre profession et les soins aux patients. N'hésitez pas à contacter la vice-présidente ou le bureau national si vous avez des questions ou des préoccupations.

Je voudrais terminer ce message en vous rappelant que notre congrès national annuel se tiendra à l'Île-du-Prince-Édouard en octobre 2023. Les préparatifs sont déjà bien avancés et nous avons lancé un appel pour des résumés. Je tiens à féliciter le comité d'organisation et j'aimerais que tous les membres prévoient d'assister à cet événement intéressant. Comme l'a dit une ancienne présidente, la force et la viabilité de l'ACITN reposent sur l'engagement de ses membres. Ensemble, nous pouvons faire en sorte que l'ACITN continue à jouer un rôle de chef de file en faisant la promotion des meilleurs soins et pratiques en néphrologie par le biais de l'éducation, de la recherche et de la communication. Je vous invite à continuer à renouveler votre adhésion à l'ACITN et à faire la promotion de notre organisation dans votre milieu de travail et auprès de vos collègues.

Salutations cordiales,

Cathy Cake, MEd, BN, RN, CNeph(C)
Présidente de l'ACITN
2021–2023

Your Board in Action

It is a delight to write to you as your President-Elect/Treasurer for CANNT. I continue to express my sincere and deep appreciation for your unrelenting perseverance and dedication. I also want to take this opportunity to wish you a Happy New Year 2023!

I continue to be amazed and inspired by the aptitude, talent, and commitment represented by nephrology professionals throughout Canada. Thank you for everything you do for the advancement of nursing and CANNT, as we strive to achieve new heights in making Canada a healthier, better place. CANNT continues to acknowledge and applauds your hard work in providing exemplary nephrology care.

CANNT-ACITN invites you to join us in Charlottetown, PEI on October 26-28, 2023, for the CANNT National Conference 2023 themed *CANNT stop, won't stop – Finding creative ways to bridge the gap*. Abstracts are currently being accepted for oral and poster presentations and I encourage you to submit research and innovative projects. For submission guidelines kindly click on the link for further details https://cannt-acitn.ca/cannt-2023-abstract-submission/

Your conference committee is working diligently to create an innovative and exciting program to meet the needs of nephrology professionals from novice to advanced practice. We hope to see you in Charlottetown, PEI on October 26-28, 2023.

The World Kidney Day Joint Steering Committee has declared 2023 to be the year of "Kidney Health for All – Preparing for the Unexpected, Supporting the Vulnerable!" Join CANNT-ACITN in increasing awareness about kidney disease. #WorldKidneyDay #kidneyhealthforall

CANNT-ACITN continues to host free webinar series throughout the winter and spring for all CANNT members. Check out the link for further details https://cannt-acitn.ca/webinars/.

I want to express my heartfelt gratitude for your commitment to CANNT. I cannot wait to see, hear, and experience all the great things we are going to accomplish together.

Wishing you a blessed 2023…

Alicia Moonesar

Dr. Alicia Moonesar, DNP, MScN, NP-PHC
CANNT President-Elect/ Treasurer
2021–2023

Votre conseil d'administration à l'œuvre

Je suis ravie de vous écrire à titre de présidente désignée et trésorière de l'ACITN. Une fois de plus, je tiens à vous exprimer ma sincère et profonde reconnaissance pour votre persévérance et votre dévouement continus. Je profite également de l'occasion pour vous souhaiter une bonne année 2023!

Les aptitudes, le talent et le dévouement des professionnels de la néphrologie de partout au Canada continuent de m'émerveiller et de m'inspirer. Merci pour tout ce que vous faites pour l'avancement des soins infirmiers et de l'ACITN qui s'efforce d'atteindre de nouveaux sommets pour faire du Canada un endroit plus sain et meilleur. L'ACITN continue de reconnaître et de saluer votre travail acharné pour prodiguer des soins de santé exemplaires en néphrologie.

Nous vous invitons à vous joindre à nous lors du congrès national de l'ACITN-CANNT, qui aura lieu à Charlottetown, à l'Île-du-Prince-Édouard, du 26 au 28 octobre 2023. Cette année, le thème du congrès est *Trouvons des moyens créatifs de combler l'écart*. Nous acceptons présentement les résumés pour les présentations orales et les affiches, et je vous encourage à soumettre des travaux de recherche et des projets novateurs. Pour connaître les modalités de soumission, visitez le https://cannt-acitn.ca/cannt-2023-abstract-submission/.

Le comité du congrès travaille avec ardeur pour créer une programmation novatrice et captivante qui répond aux besoins des professionnels en néphrologie débutants et chevronnés. Nous espérons vous voir à Charlottetown, à l'Île-du-Prince-Édouard, du 26 au 28 octobre 2023.

Par ailleurs, j'aimerais vous inviter à vous joindre à nos efforts de sensibilisation du public aux maladies rénales dans le cadre de la Journée mondiale du rein. Le thème de l'édition 2023, comme annoncé par le comité directeur conjoint de l'évènement, est « La santé rénale pour tous – se préparer à l'inattendu, soutenir les personnes vulnérables. ». #Journéemondialedurein #santérénalepourtous.

D'autre part, veuillez noter que l'ACITN-CANNT continuera d'organiser des webinaires gratuits pour ses membres tout au long de l'hiver et du printemps. Pour plus de détails, consultez le https://cannt-acitn.ca/webinars/.

Je tiens à vous exprimer ma sincère gratitude pour votre engagement envers l'ACITN. J'ai hâte de voir se matérialiser tous les projets que nous réaliserons ensemble à l'avenir.

Je vous souhaite une très heureuse année 2023.

Alicia Moonesar

Dre Alicia Moonesar, DPI., M. Sc. Inf., IPSPL
Présidente désignée et trésorière de l'ACITN
2021–2023

NOTICE BOARD

- Canadian Nurses Association (CNA) Exam Timeline. **https://www.cna-aiic.ca/en/certification/about-certification**

	Spring 2023	Fall 2023
Initial exam or renewal by exam application window	January 11–March 31, 2023	June 5–September 30, 2023
Certification exam window	May 1–15, 2023	November 1–15, 2023
Renewal by continuous learning application window	January 11–December 16, 2023	

- **May 7–10, 2023.** American Nephrology Nurses' Association (ANNA) National Symposium. Renaissance Palm Sprngs & Palm Springs Convention Center, Palm Springs, CA. **https://www.annanurse.org/events/2023-national-symposium**
- **May 29–31, 2023.** Renal Society of Australasia (RSA) Annual Conference. Sydney Masonic Centre, Sydney, Australia. Darwin Convention Centre, Darwin, Australia. **https://www.renalsociety.org/education/2023-annual-conference/**
- **June 15–18, 2023.** 60th European Renal Association (ERA) Congress | Milan & Virtual 2023. Milano Convention Centre (MiCo), Milan, Italy. **https://www.era-online.org/events/milan-2023/**
- **September 20, 2023.** Nephrology Health Care Professionals' Day (celebrated every third Wednesday of September annually)
- **October 14–17, 2023.** 51st EDTNA/ERCA International Conference, Vilnius, Lithuania. **https://www.edtnaerca.org/conferences/conferences-vilnius-2023**
- **October 26–28, 2023.** CANNT National Conference - CANNT Stop, Won't Stop – Finding Creative Ways to Bridge the Gap, Charlottetown, PEI.
- **November 2–5, 2023.** American Society of Nephrology (ASN) 2023 Kidney Week. Pennsylvania Convention Center, Philadelphia, PA. **https://www.asn-online.org/education/kidneyweek/**
- **September 26–29, 2024.** International Society for Peritoneal Dialysis (ISPD) Congress (ISPD 40th Anniversary). Dubai World Trade Center, Dubai, UAE. **www.ispd.org/dubai2024**

Nephrology Certification Registration Status Report 2022

Initial and Renewal by Exam to Renew in 2022	Renewal by Continuous Learning (CL) Hours	Total of Initials and Renewals	Due
41	80	121	191

Exploring the option of peritoneal dialysis for patients with a left ventricular assistive device

By Anna Gozdzik

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ABSTRACT

Nephrology nurses and healthcare professionals at urban and community hospitals are caring for patients suffering from more medically complex diseases. These patients may include patients on hemodialysis (HD) with a left ventricular assistive device (LVAD). This article will discuss a nursing experience with a patient scenario that has not previously been published, review the literature for LVADs and dialysis, and present peritoneal dialysis (PD) as a safe option for this group of patients. When nephrology nurses advocate for patients, it can be a gateway to stronger partnerships between nephrology and cardiovascular services to achieve improvement in quality of life (QOL) (MacIver & Ross, 2021), decreased costs associated with hospital stays (Guglielmi et al., 2014), and decreased travel time for dialysis (Moist et al., 2008). Furthermore, since PD is a home dialysis modality, a thorough nursing assessment is essential in order to determine if patients and their caregivers are able to cope with this modality of treatment. This article will be useful to nephrology nurses who are discussing dialysis options with patients with complex chronic kidney disease or on dialysis.

Heart failure is one of the top causes of death and hospitalization for the elderly (Dai et al., 2012) and it is often associated with renal dysfunction (Schaubroeck et al., 2020). Nephrology professionals need current evidence when providing care to this group of patients in order to be able to provide information about which modality options for renal replacement therapy are available to this group of patients. Furthermore, when patients present on HD with an LVAD implanted, nurses should be able to explore options such as PD, even if it has not been previously explored. Nurses are in a position to advocate for patients, especially when on daily HD, and when patients inquire about what their dialysis treatments options are.

AUTHOR NOTE

Anna Gozdzik, MN, RN, CNeph(C), Nurse Navigator, Division of Nephrology, University Health Network, Toronto, Ontario

Correspondence should be addressed to: Anna Gozdzik, Division of Nephrology, University Health Network, 12 Eaton North, 12EN 204A, Toronto, ON M5G 2C4.

Phone: (416) 340-4800 ext. 5129; fax: (416) 340-4291; email: **anna.gozdzik@uhn.ca**

In a tertiary care centre in Toronto, Ontario, an assessment for patients diagnosed with kidney failure is performed by a nurse, which includes a discussion about modality options for renal replacement therapy for all patients receiving dialysis, as well as nephrology patients preparing for discharge from the hospital. This paper will discuss PD as a safe renal replacement therapy for a 63-year-old patient with cardiorenal syndrome with a tunneled catheter for HD and an LVAD. The patient had an LVAD inserted and post-procedure developed sepsis, clostridium difficile diarrhea and gastro-intestinal bleed among others. The kidney function continued to decline and the patient was initiated on HD in the intensive care unit. Once the patient stabilized, the patient education nurse was consulted to discuss dialysis modality options and a plan for discharge. Due to the lack of experience with PD for patients with LVADs, a review of the literature ensued. The knowledge gained from the review, as well as the experience at an American dialysis centre with patients on dialysis with an LVAD can be used when discussing options with care teams and patients.

LITERATURE REVIEW

Congestive Heart Failure and Left Ventricular Assistive Devices

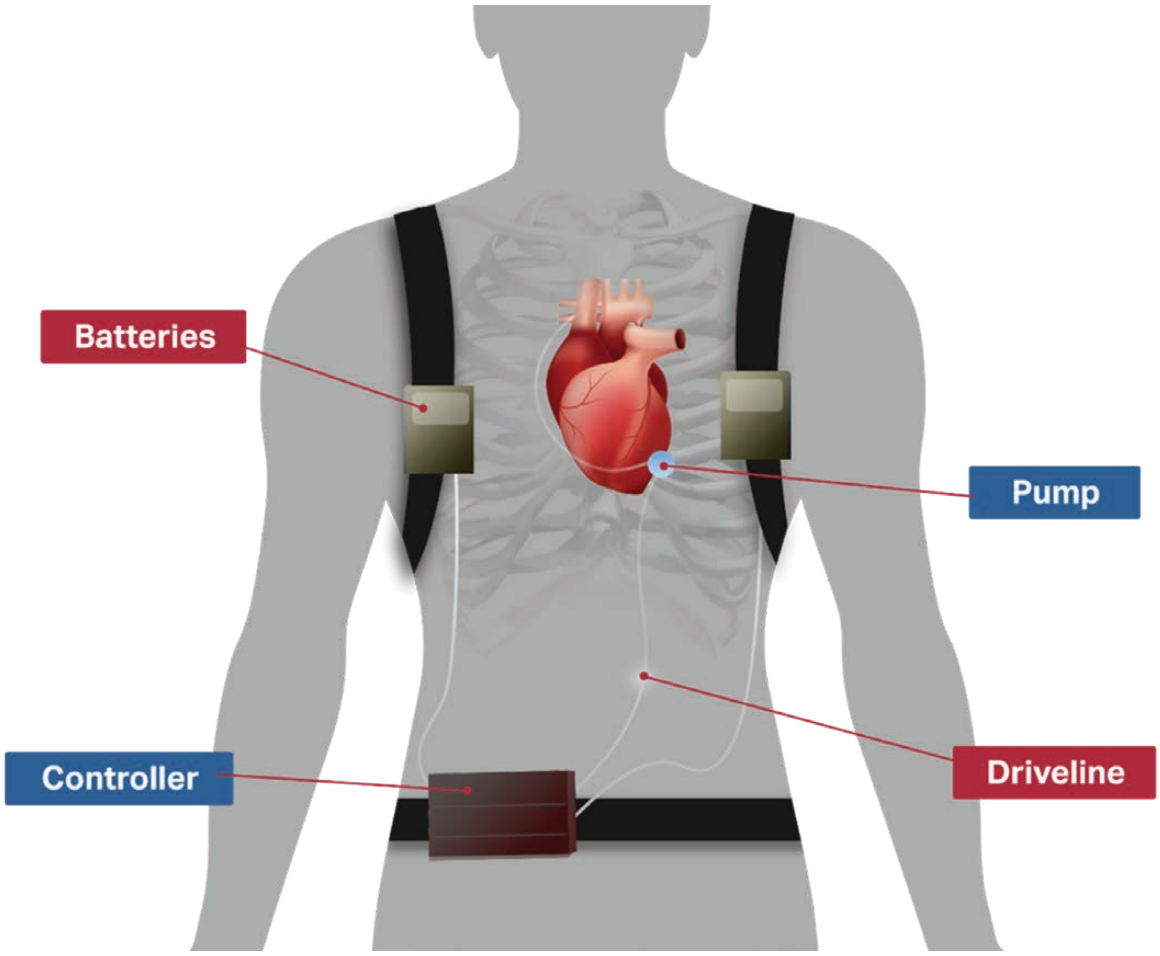
Congestive heart failure is defined as an "inadequate cardiac output when the heart is unable to pump enough blood to meet the metabolic requirements of body tissues" (Bousquet, 1990, p. 35). In some cases, ventricular assistive devices are used for patients who develop refractory heart failure or cardiogenic shock. The function of an LVAD (Figure 1) is to divert oxygenated blood from the left side of the heart from either the atrium or the ventricle to a pump and return it to or near the aorta. An LVAD is used when "mechanical support is needed when medical therapy fails to restore adequate blood pressure or organ perfusion" (Boehmer & Popjes, 2006, p. S269). Due to hypoperfusion, the kidneys are one of the organs at risk of dysfunction or failure and, therefore, are one of the most common reasons to explore mechanical ventricular device support (Boehmer & Popjes, 2006; Bousquet, 1990).

Heart Failure and Dialysis

A review by Shiba and Shimokawa (2011) concluded that heart failure is the leading cause of mortality in developed countries. In Canada, it is estimated that hospital admissions for heart failure cost the country $482 million in 2013 and are projected to increase to $720 million by 2030 (Tran, 2016). Furthermore, there is a prevalence of chronic kidney disease (CKD) in 35-70% of heart failure cases. The co-morbidity

Figure 1

Components of a Left Ventricular Assistive Device



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of CKD is associated with increased hospitalization due to worsening heart failure (Shiba & Shimokawa, 2011). There is strong evidence for using PD for patients with diuretic-resistant heart failure, as it provides gentle ultrafiltration. It also allows for draining of ascites secondary to right-sided heart failure. The use of PD has been found to reduce the number of hospitalizations by 55% and the duration of hospitalizations by 84% (Francois et al., 2015).

Dialysis and LVADs

Patients with an LVAD who require ongoing HD are burdened, along with their caregivers, with travel time to receive dialysis. Studies show that there is a negative association between travel time and quality of life for dialysis patients (Moist et al., 2008). Patients with heart failure present with vulnerable hemodynamics and may require daily HD for slower removal of water and solute to allow for adequate time for vascular refilling to avoid hypotension (Puttagunta & Holt, 2015). In order to facilitate a transition home for these patients, a partnership is needed between the LVAD team and HD units (Patel et al., 2013). There are delays with discharges home due to the discomfort of external HD centres to safely dialyze patients with an LVAD (Guglielmi et al., 2014; Patel, Rame, & Rudnick, 2014; Quader et al., 2014). An American study indicated that only 15 out of 281 (5.3%) HD sessions were interrupted or terminated for six patients with an LVAD. The most frequent reason was symptomatic hypotension and three of the episodes were due to sepsis secondary to dialysis catheter-related infection; the remainder resolved with discontinuation of HD, and no further intervention was required. Furthermore, a component of safely dialyzing this group of patients is the requirement for the nursing staff to undergo additional training for monitoring of blood pressure in pulseless patients (Quader et al., 2014).

Extensive literature search reveals that limited published data are available discussing PD for patients with an LVAD. The Canadian Cardiovascular Society (2017) discusses the use of HD for cardiorenal syndrome, but the use of peritoneal dialysis is not discussed. However, more recently, the newer LVADs allow the possibility of implantation in intrapercardial or pre-peritoneal areas, thus allowing PD to be a possible option (Patel et al., 2013). Since the 1980s, heart failure has

been managed with PD to remove fluid for patients who are resistant to diuretic therapy (Bousquet, 1990). It is essential to note that PD provides several advantages for patients with LVADs. Most importantly, there is a reduced risk of bacteremia due to PD catheters, as opposed to percutaneous and tunneled HD catheters (Guglielmi et al., 2014; Thomas et al., 2012). Furthermore, there is an option to insert a PD catheter with conscious sedation and local anesthetic without the need for general anesthesia, as may be required for many advanced laparoscopic PD catheter insertions. Other advantages of PD over HD include: gentle ultrafiltration, chance for renal recovery, preservation of residual renal function for a longer period of time, and the benefit of being able to perform home dialysis therapy for these patients (Thomas et al., 2012). Since patients with an LVAD already have the necessary support systems at home, the transition to PD is easier (Guglielmi et al., 2014). The nursing role is essential to explore the patient's social needs and other issues that allow them to be empowered in making the best decisions to meet their individual needs (Wright & Wilson, 2015). As part of the nursing assessment, exploring the patient's current and future living situation, available family, friends, or community supports, as well as income and access to various transportation options allows for a meaningful discussion about dialysis modality options.

Coping Quality of Life and LVAD Management

It has been previously noted that QOL can be adversely affected in some patients with LVADs. LVADs require a process of adapting to lifestyle changes for patients and designated caregivers (Adams & Wrightson, 2018). On the other hand, a Toronto study found that LVADs significantly improve QOL, but patients do continue to experience some level of emotional distress related to fear and anxiety among others (MacIver & Ross, 2012). In a qualitative study by Sandau et al. (2014) of patients with an LVAD, an improvement in heart failure symptoms was reported, but patients expressed that routine tasks now required planning. Participants were aware that they needed to modify their activities of daily living and move slowly while completing them.

COST AND RESOURCES

At our tertiary care centre in Toronto, Ontario, there is a history of providing care for patients who have an LVAD and are on HD. Discharges from inpatient care for this group of patients require collaboration among leadership teams from several specialties, and can be resource-intensive. There are additional discharge challenges for patients living outside of the urban setting. Discharge to home is often delayed because the most accepting regional dialysis centres and community hospital dialysis units are required to assemble and then send a team of key individuals to Toronto for training with the HD and LVAD nurse educators. These types of training sessions are at a cost to the accepting dialysis unit. There are usually delays in scheduling these education sessions and, as a result, the patient's hospital stay is extended (Guglielmi et al., 2014). This comes at an average cost of $1,492 CAD per day at a teaching hospital (Canadian Institute for Health Information, 2016).

An alternative to this resource-intensive discharge process is to convert these patients to PD while they are in hospital. This requires collaboration between the nephrology and cardiovascular service in terms of timelines and assessment for candidacy. Additionally, of importance, the cost of conventional outpatient HD is approximately $60,000 CAD per patient per year (The Kidney Foundation of Canada, 2012) or more recently in Manitoba found to have an annual maintenance cost of $64,214, whereas the cost of PD is approximately $38,658 (Beaudry et al., 2018). Furthermore, patients describe the LVAD post-discharge protocol that requires a 24-hour a day caregiver to be present for one month as an intrusion into their family dynamics and responsibilities (Guglielmi et al., 2014).

NURSING ASSESSMENT AND INTERVENTION

A comprehensive nursing assessment is an instrumental component for a patient successfully transitioning to a home-based modality, such as PD, by using a variety of techniques and methods. The shared decision-making model (Murray et al., 2013; RNAO, 2009) gives structure to a patient assessment. During the assessment, there is a need to set aside time to explore patients' lifestyle, goals, values, and experiences (Lecouf et al., 2013; Sondrup et al., 2011; Watson, 2008; Watson, 2013) and how the current situation is impacted by their medical treatments. Another strategy is to use motivational interviewing techniques, such as building rapport, conveying empathy, and determining the patient's readiness (Elwyn et al., 2014). Following the assessment, nurses can use a variety of strategies to educate patients about their dialysis modality options while providing continued support (Lecouf et al., 2013; Murphy & Byrne, 2010). These strategies allow patients to make an informed decision.

At our centre, a nurse with a patient education focus (previously published by Watson, 2013) explores dialysis options available to patients. The option of PD is desirable for this patient population as there is assistance of home care in Ontario and additional support to manage the PD (Oliver et al., 2007; Quinn et al., 2007) while patients are concurrently managing the LVAD. These services are essential for this group of patients and caregivers who are already burdened with managing an LVAD. At our centre in Toronto, Ontario, family members learn LVAD care and troubleshooting and need to be with the patient at all times for at least four weeks following discharge, after which some independence is given to patients if parameters such as exercise tolerance has improved and there are no LVAD alarms.

NURSING EXPERIENCE WITH CASE

A referral was received for a patient in his sixties with a history of ischemic cardiomyopathy, atrial fibrillation, and an anterior myocardial infarction. He has an LVAD implanted for progressive heart failure and during admission developed an acute kidney injury secondary to cardiogenic shock and was dialysis dependent. He lived in a remote part of the province

on his own and was retired. He had supportive children. His drive to the local hemodialysis unit would have been more than one hour.

The nurse used several sessions that included one-on-one education, peer support from The Kidney Foundation of Canada Kidney Connect program, and a tour of the PD unit for the patient under review in this paper. These strategies are all standard practice for patients who are newly started on dialysis at our tertiary care centre where patient was admitted. The patient was living independently prior to admission in rural Ontario and the plan following discharge was for patient to move in with one of his children for additional support. The challenges identified included the need for patient to travel to the local HD unit and to have family available to provide transportation. Following these education sessions, the patient expressed interest in switching to PD to allow flexibility in his lifestyle. The utilization of PD for the patient with an LVAD was supported by evidence presented at the 2016 Annual Dialysis Conference of other centres following this practice, as well the recommendation to have a PD champion for this particular patient (N. Colobong Smith, personal communication, March 25, 2016). This decision was also informed by published successful experiences with a patient with an LVAD by the teams at the University of Washington Medical Center in Seattle, Washington (Thomas et al., 2012) and Christ Medical Center in Oak Lawn, Illinois (Guglielmi et al., 2014).

Historically, the default for this group of patients would have been for the nephrology team to facilitate a discharge to a local HD centre. The option of PD would not have been a consideration. The nurse involved in the patient's case advocated on behalf of the patient to the nephrology team to explore the option of PD for this patient to meet his goals of care and values. In consultation with the cardiovascular surgical team, a collaborative decision was made to transition the patient to PD. The nurse facilitated the plan to proceed with a percutaneous PD catheter insertion by a nephrologist, as described by Abreu (2015). Once the PD catheter was ready for use, the patient underwent one-on-one training in order to facilitate discharge home on PD with home care support.

IMPLICATIONS FOR PRACTICE

Due to the lack of publications, this successful experience in a tertiary care centre in Toronto, Ontario, can provide the foundation for other nephrology programs in Canada to publish their experience with this group of patients to add to the body of knowledge. A special consideration should be given to all patients with LVADs who are on HD or need to start dialysis to offer them the option of PD modality if there are no contraindications. What enables this to happen is a strong collaboration between the cardiovascular and nephrology teams. The presence of a PD champion for LVAD has anecdotally been found to be important (N. Colobong Smith, personal communication, March 25, 2016). The nursing assessment and advocacy is crucial for this collaboration to be effective. A nursing role that can provide consistent coverage to consulting nephrology team is crucial as covering staff may change. This successful experience at our centre has provided further support in offering the option of PD to other patients with LVADs. Since this case, two more patients with LVADs have been successfully transitioned to PD. This experience has laid the foundation for developing further research to analyze outcomes for patient with LVADs and PD. Exploration of renal recovery, types of PD modality, peritonitis rates, as well as QOL scores, would add to the body of literature for this group of patients.

CONCLUSION

In conclusion, patients with heart failure or LVADs are at risk of hypoperfusion to their kidneys and, consequently, becoming dialysis-dependent. Traditionally, HD is initiated acutely for this group of patients, but as the above-mentioned experience has shown, PD is a safe alternative for this group of patients if there are no contraindications. Nurses are ideally positioned to advocate and collaborate with multiple teams when working with these complex patients to guide them in the decision-making process for choosing dialysis modality. The knowledge gained from this experience and literature review gives nurses the tools to assess patients for PD, provide education, and advocate on their behalf to the medical team to consider this is an alternative modality.

REFERENCES

Abreu, Z. (2015, September 16). Starting a bedside PD catheter insertion program. Presentation at Home Dialysis Interest Group Presentation. http://www.cannt.ca/pdfs/CityWIde%20Sep%202015%20Bedside%20Final.pdf

Adams, E. E. & Wrightson, M. L. (2018). Quality of life with an LVAD: A misunderstood concept. *Heart & Lung, 47*(3), 177–183.

Beaudry, A., Ferguson, T. W., Rigatto, C., Tangri, V., Dumanski, S., & Komenda, P. (2018). Cost of dialysis therapy by modality in Manitoba. *Clinical Journal of the American Society of Nephrology, 13*, 1197–1203.

Boehmer, J. P. & Popjes, E. (2006). Cardiac failure: Mechanical support strategies. *Critical Care Medicine, 34*(9 Suppl), S268–277.

Bousquet, G. (1990). Congestive heart failure: A review of non-pharmacologic therapies. *The Journal of Cardiovascular Nursing, 4*(3), 35–46.

Canadian Cardiovascular Society (2017). Society guidelines: 2017 comprehensive update of the Canadian Cardiovascular Society guidelines for the management of heart failure. *Canadian Journal of Cardiology*, *33,* 1342–1433. https://doi.org/10.1016/j.cjca.2017.08.022

Canadian Institute for Health Information (2016, August). *Care in Canadian ICUs*. https://secure.cihi.ca/free_products/ICU_Report_EN.pdf

Dai, S., Walsh, P., Wielgosz, A., Gurevich, Y., Bancej, C., & Morrison, H. (2012). Comorbidities and mortality associated with hospitalized heart failure in Canada. *Canadian Journal of Cardiology*, 28, 74–79.

Elwyn, G., Dehlendorf, C., Epstein, R. M., Marrin, K., White, J., & Frosch, D. L. (2014). Shared decision making and motivational interviewing: Achieving patient-centered care across the spectrum of health care problems. *Annals of Family Medicine*, *12*(3), 270–275.

Francois, K., Ronco, C., & Bargman, J. M. (2015). Peritoneal dialysis for chronic congestive heart failure. *Blood Purif, 40*, 45–52.

Guglielmi, A. A., Gugliemi, K. E., Bhat, G., Siemeck, R. & Tatooles, A. J. (2014). Peritoneal dialysis after left ventricular assist device placement. *American Society for Artificial Internal Organs, 60*(1), 127–128.

Lecouf, A., Ryckelnych, J., Ficheux, M., Henri, P., & Lobbedez, T. (2013). A new paradigm: Home therapy for patients who start dialysis in an unplanned way. *Journal of Renal Care, 39*(Suppl. 1), 50–55.

MacIver, J. & Ross, H. J. (2012). Quality of life and left ventricular assist device support. *Circulation, 126*, 866–874.

Moist, L. M., Bragg-Gresham, J., Pisoni, R. L., Saran, R., Akiba, T., Jacobson, … Port, F. K. (2008). Travel time to dialysis as a predictor of health-related quality of life, adherence, and mortality: The dialysis outcomes and practice patterns study (DOPPS). *American Journal of Kidney Disease, 51*(4), 641–650.

Murphy, F., & Byrne, G. (2010). The role of the nurse in the management of acute kidney injury. *British Journal of Nursing 19*(3), 146–152.

Murray, M. A., Bissonnette, J., Kryworuchko, J., Gifford, W., & Calverley, S. (2013). Whose choice is it? Shared decision making in nephrology care. *Seminars in Dialysis, 26*(2), 169–174.

Oliver, M. J., Quinn, R. R., Richardson, E. P., Kiss, A. J., Lamping, D. L., & Manns, B. J. (2007). Home care assistance and the utilization of peritoneal dialysis. *Kidney International*, *71*(7), 673–678.

Patel, A. M., Adeseun, G. A., Ahmed, I., Mitter, N., Rame, J. E., & Rudnick, M. R. (2013). Renal failure in patients with left ventricular assist devices. *Clinical Journal of the American Society of Nephrology, 8*(3), 484–496.

Patel, A. M., Rame, J. E., & Rudnick, M. R. (2014). How does the nephrologist manage an LVAD patient on chronic maintenance dialysis. *Seminars in Dialysis, 27*(3), 284–288.

Puttagunta, H., & Holt, S. G. (2015). Peritoneal dialysis for heart failure. *Peritoneal Dialysis International*, 35(6), 645–649.

Quader, M. A., Kumar, D., Shah, D. B., Fatani, Y. I., Katlaps, G., & Kasirajan, V. (2014). Safety analysis of intermittent hemodialysis in patients with continuous flow left ventricular assist devices. *Hemodialysis International*, *18*(1), 192–214.

Quinn, R. R., Hunt, K. D., Lodberg, L., Pham T., & Oliver, M. J. (2007). Home care assisted peritoneal dialysis: The impact of expanding eligibility for peritoneal dialysis on the risk of hospitalization. *Peritoneal Dialysis International*, 27(Suppl 3), S18.

Registered Nurses' Association of Ontario (RNAO). (2009). Decision support for adults living with chronic kidney disease. Author.

Sandau, K. E., Hoglund, B. A., Weaver, C. E., Boisjolie, C., & Feldman, D. (2014). A conceptual definition of quality of life with a left ventricular assist device: Results from a qualitative study. *Heart & Lung, 43*(1), 32–40.

Schaubroeck, H. A., Gevaert, S., Baghsaw, S. M., Kellum, J. A., & Hoste, E. A. J. (2020). Acute cardiorenal syndrome in acute heart failure: Focus on renal replacement therapy. *European Heart Journal. Acute Cardiovascular Care, 06/2020*. https://doi.org/10.1177/2048872620936371

Shiba, N. & Shimokawa, H. (2011). Chronic kidney disease and heart failure – Bidirectional close link and common therapeutic goal. *Journal of Cardiology, 57*(1), 8–17.

Sondrup, B., Copland, M., Black, A., & Trask, M. (2011). Supporting patient choice: An intervention to promote independent dialysis therapies. *Nephrology Nursing Journal*, *38*(6), 491–497.

The Kidney Foundation of Canada (2012). *Facing the Facts*. https://www.kidney.ca/document.doc?id=1376

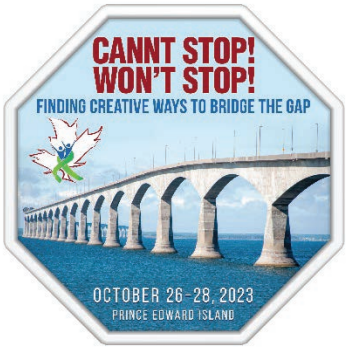
Thomas, B. A., Logar, C. M., & Anderson, A. E. (2012). Renal replacement therapy in congestive heart failure requiring left ventricular assist device augmentation. *Peritoneal Dialysis International*, *32*(4), 386–392.

Tran, D. T., Ohinmaa, A., Thanh, N., Howlett, J. G., Ezekowitz, J. A., McAlister, F. A., & Kaul, P. (2016). The current and future financial burden of hospital admission for heart failure in Canada: A cost analysis. *Canadian Medical Association Journal*, *4*(3), E365–E370.

Watson, D. (2008). Post-dialysis "pre-dialysis" care: The cart before the horse – Advanced practice nurse intervention and impact on modality selections. *The CANNT Journal*, *18*(1), 30–33.

Watson, D. (2013). Acute starts—chronic needs: Education and support for adults who have had acute start dialysis. *Seminars in Dialysis*, *26*(2), 184–187.

Wright, L. S. & Wilson, L. (2015). Quality of life and self-efficacy in three dialysis modalities: Incentre hemodialysis, home hemodialysis, and home peritoneal dialysis. *Nephrology Nursing Journal, 24*(5), 463–476.



CALL FOR ABSTRACTS

CANNT-ACITN invites you to join us in Charlottetown October 26–28, 2023!

Abstracts are currently being accepted for ORAL and POSTER presentations for CANNT-ACITN 2023 – **"CANNT stop, won't stop – Finding creative ways to bridge the gap"**. Abstract submissions should incorporate the theme—sharing our knowledge and experience—appropriate for the novice through to the advanced practice professional.

Topics of interest may include: clinical research, innovative projects and solutions, ethics, case presentations and clinical reviews. All abstract submissions must be evidence-based.

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Submissions must include the following:

1. Abstract Title
   - must accurately reflect the content of the presentation
   - must be formatted in sentence case (capitalize first word and remaining words begin in lower case)
2. Authors and Affiliations
   - must be included under the title and formatted as follows: Anne L. Smith[a], RN, CNeph(C), Robert G. Jones[a,b], RN

   [a]Department of Nephrology, University of Toronto, Toronto, ON; [b]Department of Nephrology, University of Alberta Hospital, Edmonton, AB.

   Underline the name and initials of the presenter(s).
3. Abstract Text
   - should be no longer than 300 words including headings (do not include pictures, tables or references)
   - should be as informative as possible
   - define all abbreviations the first time they appear in the abstract
   - use only the generic names of drugs
   - do not identify companies and/or products in the body or title of the abstract

   If research-based, must include below headings:
   - background
   - purpose of study
   - methods
   - results
   - conclusions
   - implications for nephrology care

   If practice/education/narrative-based, must include below headings:
   - background
   - purpose of the project
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IMPORTANT NOTES:

Only COMPLETE submissions received by April 14, 2023 will be considered.

- All correspondence will be with the first author only.
- Acceptance of abstract does not waive attendance fees (registration).
- Notification regarding selection decisions will be provided by June 1.
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- The presentation shall not make comparison to companies or products for any purposes of product marketing, nor will topics or materials used discredit companies or products.
- The abstract, and associated authors, should make full disclosure of corporate employment and/or funding sources.
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CANNT Nominations

CALL FOR NOMINATIONS 2023

The CANNT Nominating Committee is looking for CANNT/ACITN members to apply for the following positions on the CANNT/ACITN Board of Directors. Positions will commence October 2023.

Deadline for nominations is June 1, 2023.

The positions open are:
President-Elect/Treasurer

(Two-year term followed by two-year term as President)

Eligibility for office: Member in good standing

GENERAL REQUIREMENTS

Each candidate must:

✓ Understand the responsibilities of each position.
✓ Be willing to commit the required amount of time to fulfil the duties of office.
✓ Be willing to work within parliamentary procedure, which is used to ensure an efficient and fair voting procedure by self-governing organizations.
✓ Will submit a National Officer Candidate Information Form available online at **www.cannt-acitn.ca**.

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CANNT Journal is a quarterly publication that showcases excellence in nephrology nursing and technological writing through peer-reviewed articles that examine current issues and trends in nephrology nursing and technological practice, education, and research. *CANNT Journal* is the official journal of the Canadian Association of Nephrology Nurses and Technologists and supports the association's mission to serve its membership by advancing the development of nephrology nursing and technological knowledge. The journal is indexed in MEDLINE and CINAHL.

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CANNT Journal welcomes manuscripts related to nephrology nursing and technological education, practice, research, or health policy. The manuscript must be the sole intellectual property of the authors. Once accepted, manuscripts become the permanent property of *CANNT Journal*, and may not be reproduced elsewhere without written permission from the publisher.

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- Narratives that describe the nursing experience
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- Literature or systematic reviews

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Submission of the article implies that the work described has not been published elsewhere (except in the form of an abstract or a published lecture), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and responsible authorities where the research was carried out, and that, if accepted, it will not be published elsewhere in the same form without the written consent of the copyright holder. Upon acceptance of the submitted material, the author(s) must transfer copyright ownership to *CANNT Journal*. Statements and opinions contained within the work will remain the responsibility of the author(s).

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All contributions will be initially assessed by the editors for suitability for the journal. Manuscripts deemed suitable are sent to two independent expert reviewers to assess the quality of the paper. A manuscript will only be sent for review if the editors determine that the paper meets the appropriate quality and relevance requirements in keeping with the particular aim and scope of *CANNT Journal*.

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The criteria for acceptance for all manuscripts include the quality and originality of the research or intellectual material, its significance/appeal to journal readership, and the general writing style.

PREPARING THE SUBMISSION

The following components are required for all submissions. Manuscripts that do not meet these requirements will be returned to the corresponding author for technical revisions before undergoing peer review.

The manuscript should be submitted in separate files in the following order: title page; abstract with key words; main text including references; and figures/tables. A cover letter may be supplied at the authors' discretion.

Title page

Include:

- Title of the manuscript (concise and informative)
- Short running title of fewer than 40 characters
- Full names, highest academic degrees, and affiliations of all authors with email address and telephone/fax number of corresponding author
- Authors' institutional affiliations (department, institution, city, country) where research work was conducted
- Any acknowledgements (including disclosure of funding), credits, or disclaimers, conflict of interest statement for all authors

Abstract and keywords

Submit structured or summary abstract of up to 250 words. Word limit includes headers in a structured abstract (e.g., *background*, *purpose*, *method*, *findings*, and *discussion*).

The abstract should be a succinct summary of the major issue, problem, or topic being addressed, and the findings and/or conclusions in the manuscript. It should not duplicate material in the main text. It should not contain subheadings, abbreviations, or reference citations.

Provide up to eight keywords that describe the contents of the manuscript.

Main text (manuscript, reference list)

Main text:

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- Use the *Publication Manual of the American Psychological Association* (APA) 7th edition (copyright 2020) for style and format guidelines.
- As manuscripts are double-blind peer reviewed, the main text should not include any information that might identify the authors. Therefore, do not include any identifying information (i.e., authors' names).
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- Citations and reference list is to be styled according to the APA 7th edition (copyright 2020).
- Provide URL for all references where available.
- Ensure that every reference cited in the text is also present in the reference list (and vice versa).

Tables/figures

- Submit each table or figure as a separate file, and as editable text and not as an image.
- Prepare tables/figures according to APA 7th edition (copyright 2020).
- Cite tables/figures consecutively in the text, and number them in that order. Do not embed tables/figures in the manuscript text file.
- Number table and figure consecutively in accordance with their appearance in the text and place the title of the table/figure and any table/figure notes below the table/figure body.
- Use tables sparingly and ensure that the data presented in them clarify and supplement, rather than duplicate, results described in the main text. Only tables that are 3 manuscript pages or shorter will be accepted to be published within the article.
- Authors using previously published tables and figures must include written permission from the original publisher. Such permission must be attached to the submitted manuscript.

MANUSCRIPT SUBMISSION

Once the submission materials have been prepared in accordance with instructions in "Preparing the Submission" above, manuscripts must be submitted online at: **https://cannt-acitn.ca/journal/ojs/index.php/canntj**

New users must click "Register" at the upper right of the page. Once logged in, select "Submissions" from the "About" dropdown.

AFTER SUBMISSION

There are three stages of manuscript review prior to the final decision about the article's status for publication.

Preliminary

Preliminary review by the editors to determine the suitability of the article for peer review. The editors assess all manuscript presentation requirements including style and format of the manuscript.

Editorial peer review

The peer review process determines scholarly merit of the article. All manuscripts are reviewed by two members of the Editorial Review Panel. The acceptance criteria for all papers lie in the quality and originality of the work and its significance to journal readership. Manuscripts are only sent to reviewers if the editors determine that the paper merits further review.

Determination of eligibility for publication

After the peer review, the editors make a decision regarding the eligibility of the article for selection based on the comments and recommendations of the reviewers. Based on the peer review evaluation, the editors make one of the following decisions:

- Accept without revisions
- Accept after completing minor revisions
- Re-submit after completing major revisions – re-review by original reviewers
- Reject

AFTER ACCEPTANCE

Corresponding authors will receive a PDF proof of the article. The page proof should be carefully proofread for any copyediting or typesetting errors. It is the authors' responsibility to ensure that there are no errors in the proofs. Authors should also make sure that any renumbered tables, figures, or references match text citations and that figure legends correspond with text citations and actual figures. Proofs must be returned within the deadline specified by the editors.

Alterations to the proof that are beyond those required to correct errors or to answer queries, or are a reworking of previously accepted material will **not** be allowed. The editors reserve the right to deny any changes that do not affect the accuracy of the content.

POST PUBLICATION

The corresponding author will receive a hard copy of the journal issue as well as a PDF copy of the article.

If accepted, your article must not be published elsewhere in similar form, in any language, without the consent of the publisher. You may not post the PDF file of your copyedited article, or your final published article in any repository or online social media site.

OPEN ACCESS OPTION

Authors of accepted peer-reviewed articles have the choice to pay a fee to allow perpetual unrestricted online access to their published article to readers globally, immediately upon publication. This option has no influence on the peer review process. All manuscripts are subject to *CANNT Journal*'s standard double-blinded peer-review process and will be accepted or rejected based on their own merit.

The article processing charge of $250.00 is charged on acceptance of the manuscript and should be paid within 5 days by the author(s). Payment must be processed for the article to be published open access.

CONFLICTS OF INTEREST AND SOURCE OF FUNDING

At the time of manuscript submission, authors should disclose any potential sources of conflict of interest, which includes any financial interest or relationship that might be perceived as influencing the authors' objectivity. The existence of a conflict of interest does not preclude publication. Authors must also declare if they have no conflict of interest to declare. Sources of funding should be included on the title page under the heading "Conflicts of Interest and Source of Funding." Each author must complete and submit the journal's copyright transfer agreement, which includes a section on the disclosure of potential conflicts of interest.

COPYRIGHT TRANSFER AGREEMENT

At the time of submission, the submitting author will be presented with the copyright transfer and conflict of interest form. Co-authors will receive an email with instructions to also complete the form in order to proceed with the review process.

EDITORIAL OFFICE CONTACT DETAILS

Jovina Bachynski and Rosa Marticorena, Editors
cannt.journal1@gmail.com

SUBMIT YOUR MANUSCRIPT ONLINE TODAY

https://cannt-acitn.ca/journal/ojs/index.php/canntj

Lignes directrices pour la soumission des manuscrits au *Journal ACITN*

DESCRIPTION

Le *Journal ACITN* est une revue publiée trimestriellement qui met en valeur l'excellence des écrits sur les soins infirmiers et les technologies en néphrologie par le biais d'articles évalués par des pairs qui examinent les questions et les tendances actuelles de la pratique, de la formation et de la recherche dans ce domaine. Le *Journal ACITN* est la revue officielle de l'Association canadienne des infirmières et infirmiers et des technologues de néphrologie et soutient la mission de l'association pour servir ses membres en perfectionnant le développement des connaissances en matière de soins infirmiers et de technologies en néphrologie. La revue est référencée dans les bases de données MEDLINE et CINAHL.

POLITIQUES RÉDACTIONNELLES

Le *Journal ACITN* accepte les manuscrits portant sur la formation, la pratique, la recherche sur les soins infirmiers et les technologies de néphrologie ou la politique en matière de santé. Le manuscrit doit être la propriété intellectuelle unique des auteurs. Une fois acceptés, les manuscrits deviennent la propriété permanente du *Journal ACITN* et ne peuvent être reproduits ailleurs sans l'autorisation écrite de l'éditeur.

Nous préférons les manuscrits qui présentent de l'information clinique nouvelle ou qui abordent des problématiques d'intérêt particulier pour les infirmières et infirmiers et les technologues en néphrologie. Plus précisément, nous recherchons :

- Rapports de recherche originaux;
- Articles cliniques pertinents;
- Rapports sur des approches innovatrices en matière d'amélioration de la qualité;
- Textes narratifs relatant une expérience de pratique infirmière ou technologique;
- Textes sous forme de questions et de réponses sur la pratique interdisciplinaire;
- Revues de littérature ou revues systématiques.

Nous encourageons également les tribunes libres sous forme de courrier des lecteurs comme moyen de promouvoir le dialogue et des perspectives de rechange aux articles publiés dans le *Journal ACITN*. Veuillez choisir « Courrier des lecteurs » dans le menu déroulant de la Section sur la page des soumissions.

DÉCLARATION RELATIVE À LA SOUMISSION

La soumission de l'article laisse entendre que l'œuvre décrite n'a pas été diffusée autre part (sauf sous la forme d'un résumé ou d'une présentation orale publiée), qu'elle n'est pas à l'étude pour publication ailleurs, que sa publication est approuvée par tous les auteurs et les autorités responsables où la recherche a été réalisée, et que, si elle est acceptée, elle ne sera pas publiée ailleurs sous la même forme sans le consentement écrit du titulaire du droit d'auteur. À l'acceptation du document soumis, le ou les auteurs devront transférer la propriété du droit d'auteur au *Journal ACITN*. Les déclarations et les opinions contenues dans l'œuvre demeurent la responsabilité de l'auteur ou des auteurs.

ÉVALUATION PAR LES PAIRS

Le *Journal ACITN* fonctionne selon un processus d'évaluation par les pairs à double insu. Les noms des évaluateurs ne seront pas divulgués à l'auteur ou aux auteurs qui auront soumis le manuscrit, de même que le ou les noms des auteurs ne seront pas divulgués aux évaluateurs.

Toutes les contributions seront initialement évaluées par les rédactrices en chef pour leur pertinence à la revue. Les manuscrits réputés acceptables sont envoyés à deux experts indépendants qui en évalueront la qualité. Un manuscrit ne sera envoyé pour évaluation que si les rédactrices en chef déterminent que le manuscrit répond aux exigences de qualité et de pertinence appropriées, conformément à l'objectif et au champ d'application particuliers du *Journal ACITN*.

Les rédactrices sont responsables de la décision définitive en ce qui a trait à l'acceptation ou au rejet du manuscrit. Les rédactrices en chef n'interviennent pas dans les décisions relatives aux articles qu'elles-mêmes ont rédigés ou que des proches ou des collègues ont écrits ou encore qui portent sur des produits ou services pour lesquels elles sont en conflit d'intérêts. Toutes les soumissions de manuscrit font l'objet du processus habituel d'évaluation par les pairs indépendants de la revue.

Les critères d'acceptation de tous les manuscrits comprennent la qualité et l'originalité de la recherche ou du matériel intellectuel, son importance ou son attrait pour le lectorat de la revue et le style d'écriture en général.

PRÉPARATION DE LA SOUMISSION

Les éléments suivants sont requis pour toutes les soumissions. Les manuscrits qui ne répondent pas à ces exigences seront renvoyés à l'auteur-ressource en vue de révisions techniques avant d'être soumis à l'évaluation par les pairs.

Le manuscrit doit être soumis en fichiers séparés dans cet ordre : page titre; résumé avec mots clés; corps du texte incluant les références; et les figures ou les tableaux. Une lettre de présentation peut être fournie à la discrétion des auteurs.

Page titre

Inclure :

- Titre du manuscrit (concis et descriptif)
- Titre court comptant moins de 40 caractères
- Nom complet, diplôme de plus haut grade et affiliations de tous les auteurs, adresse courriel et numéros de téléphone/télécopieur de l'auteur-ressource
- Affiliations institutionnelles des auteurs (département, établissement, ville, pays) où les travaux de recherche ont été réalisés
- Tous les remerciements (y compris la divulgation du financement), les crédits ou les avertissements, un énoncé de conflit d'intérêts pour tous les auteurs

Résumé avec mots clés

Soumettre un résumé structuré ou succinct de 250 mots au maximum. La limite de mots inclut les en-têtes dans un résumé structuré (p. ex., *contexte*, *objet*, *méthode*, *résultats* et *discussion*).

Le résumé doit être une description succincte de la question, du problème ou du sujet principal abordé dans le manuscrit, ainsi que les résultats ou conclusions présentés. Il ne doit pas reproduire le corps du texte. Il ne doit pas contenir de sous-titres, d'abréviations ou de citations de référence.

Fournir jusqu'à huit mots clés qui décrivent le contenu du manuscrit.

Corps du texte (manuscrit, liste de référence)

Corps du texte :

- Longueur maximum de 15 à 20 pages, à double interligne
- Se servir du guide de style *Publication Manual of the American Psychological Association* (APA), 7e édition (droit d'auteur 2020) pour les lignes directrices en matière de style et de format
- Comme les manuscrits font l'objet d'une évaluation par des pairs à double insu, le corps du texte ne doit inclure aucune information pouvant servir à identifier les auteurs. Par conséquent, il ne faut pas inclure de renseignements d'identification (p. ex., noms des auteurs)
- Paginer sans interruption dans le coin supérieur droit
- Citer les tableaux ou les figures à la suite
- S'assurer d'approuver ou d'éliminer toutes les modifications de suivi de votre document Word avant le téléversement

Références :

- N'utiliser que des sources publiées dignes de foi et de qualité
- À double interligne à la fin du manuscrit
- La liste de citations et de références doit être conforme au guide de style de l'APA, 7e édition (droit d'auteur 2020)
- Fournir les adresses URL pour toutes les références, le cas échéant
- S'assurer que toutes les références citées dans le texte figurent dans la liste de référence (et vice versa)

Tableaux ou figures

- Soumettre chaque tableau ou figure dans un fichier séparé, sous forme modifiable et non sous forme d'image
- Préparer les tableaux ou les figures selon le guide de style de l'APA, 7e édition (droit d'auteur 2020)
- Citer les tableaux ou les figures à la suite dans le texte et les numéroter dans cet ordre. Ne pas incorporer les tableaux ou les figures dans le fichier texte du manuscrit
- Numéroter les tableaux et les figures à la suite selon leur apparition dans le texte et positionner le titre du tableau ou de la figure et toute note connexe sous le corps du tableau ou de la figure
- Utiliser les tableaux avec retenue et s'assurer que les données qui y sont présentées clarifient et complètent les résultats décrits dans le corps du texte, sans toutefois les reproduire. Seuls les tableaux sur 3 pages de manuscrit ou moins seront acceptés aux fins de publication dans l'article.
- Les auteurs qui utilisent des tableaux ou des figures précédemment publiés doivent inclure l'autorisation écrite de l'éditeur original. Cette autorisation doit être jointe au manuscrit soumis.

SOUMISSION DU MANUSCRIT

Après avoir préparé le matériel de soumission conformément aux directives indiquées dans la rubrique « Préparation de la soumission » ci-dessus, les manuscrits doivent être soumis en ligne à cette adresse : **https://cannt-acitn.ca/journal/ojs/index.php/canntj**

Les nouveaux utilisateurs doivent cliquer sur « Register » (S'inscrire) dans le coin supérieur droit de la page. Une fois inscrit, sélectionner « Submissions » (Soumissions) du menu déroulant « About » (À propos de).

APRÈS LA SOUMISSION

L'examen du manuscrit se déroule en trois étapes avant que la décision ultime soit prise sur le statut de l'article aux fins de publication.

Examen préliminaire

Examen préliminaire par les rédactrices en chef afin de déterminer la pertinence de l'article aux fins d'évaluation par les pairs. Les rédactrices en chef examinent toutes les exigences de présentation de manuscrits, notamment le style et le format du manuscrit.

Évaluation rédactionnelle par les pairs

Le processus d'évaluation par les pairs détermine la valeur scientifique de l'article. Tous les manuscrits sont évalués par deux membres du comité d'évaluation rédactionnelle. Les critères d'acceptation pour tous les textes reposent sur la qualité et l'originalité de l'œuvre et sur son importance aux yeux du lectorat de la revue. Les manuscrits sont envoyés aux évaluateurs uniquement si les rédactrices en chef décident que le texte mérite un examen plus approfondi.

Détermination de l'admissibilité aux fins de publication

Après l'évaluation par les pairs, les rédactrices en chef prennent une décision concernant l'admissibilité de l'article à la sélection en se fondant sur les commentaires et les recommandations des évaluateurs. Selon l'évaluation par les pairs, les rédactrices en chef prennent l'une des décisions suivantes :

- Accepter le manuscrit sans modifications
- Accepter le manuscrit une fois les modifications mineures apportées
- Soumettre de nouveau le manuscrit une fois les modifications majeures apportées – réévaluation par les évaluateurs d'origine
- Rejeter le manuscrit

APRÈS L'ACCEPTATION

Les auteurs-ressources recevront une épreuve en format PDF de l'article. L'épreuve d'imposition doit être soigneusement relue afin de détecter toute erreur d'édition ou de composition. Il incombe aux auteurs de s'assurer que les épreuves sont exemptes d'erreurs. Les auteurs doivent également s'assurer que les tableaux, les figures ou les références renumérotés correspondent aux citations du texte et que les légendes des figures correspondent aux citations du texte et aux figures réelles. Les épreuves doivent être renvoyées dans le délai précisé par les rédactrices en chef.

Les modifications apportées à l'épreuve qui vont au-delà de ce qui est nécessaire pour corriger des erreurs ou pour répondre à des questions ou qui constituent un remaniement du matériel précédemment accepté **ne** seront **pas** permises. Les rédactrices en chef se réservent le droit de rejeter toute modification qui n'influe pas sur l'exactitude du contenu.

APRÈS LA PUBLICATION

L'auteur-ressource recevra une copie papier du numéro de la revue ainsi qu'une copie PDF de l'article.

S'il est accepté, votre article ne doit pas être publié nulle part ailleurs sous une forme similaire, en toute autre langue, sans le consentement de l'éditeur. Vous ne pouvez pas publier le fichier PDF de votre article révisé ou de votre article définitif publié dans un service d'archives ou sur un site de médias sociaux en ligne.

OPTION D'ACCÈS LIBRE

Les auteurs d'articles acceptés dans le cadre d'une évaluation par les pairs peuvent choisir de payer une redevance pour permettre aux lecteurs du monde entier d'accéder en ligne à leur article publié, sans restriction et à perpétuité, dès sa publication. Cette option n'a aucune influence sur le processus d'évaluation par les pairs. Tous les manuscrits font l'objet d'un processus standard d'évaluation par les pairs à double insu et seront acceptés ou refusés en fonction de leur propre valeur.

Des frais de traitement de l'article de 250,00 $ sont facturés à l'acceptation du manuscrit et doivent être payés dans les cinq (5) jours par le ou les auteurs. Le paiement doit être traité pour que l'article soit publié en accès libre.

CONFLITS D'INTÉRÊTS ET SOURCE DE FINANCEMENT

Au moment de la soumission du manuscrit, les auteurs doivent divulguer toute source potentielle de conflit d'intérêts, ce qui inclut toute relation ou tout intérêt financier qui pourrait être perçu comme influençant leur objectivité. La présence d'un conflit d'intérêts n'empêche pas la publication. Les auteurs doivent également déclarer qu'ils n'ont aucun conflit d'intérêts à déclarer. Les sources de financement doivent figurer sur la page titre sous la rubrique « Conflits d'intérêts et source de financement ». Chaque auteur doit remplir et soumettre le formulaire d'entente de transfert du droit d'auteur de la revue, lequel comprend une section sur la déclaration de conflits d'intérêts potentiels.

ENTENTE DE TRANSFERT DU DROIT D'AUTEUR

Au moment de la soumission, l'auteur qui soumet un manuscrit recevra un formulaire d'entente de transfert du droit d'auteur et de déclaration de conflits d'intérêts. Les coauteurs recevront des directives par courriel pour aussi remplir le formulaire afin d'amorcer le processus d'évaluation.

COORDONNÉES DU BUREAU DE LA RÉDACTION

Jovina Bachynski et Rosa Marticorena, rédactrices
cannt.journal1@gmail.com

CANNT Awards

There are several awards and grants that CANNT members can apply for yearly. Members can also nominate a fellow CANNT member for their outstanding work in nephrology.

For more information on eligibility and forms for award applications, see **www.cannt-acitn.ca** under ***Resources – CANNT Awards/Bursaries***.

IMPORTANT: Members may apply for more than one bursary per year but will only be able to be the recipient of one award per year. Awards and bursaries are pending available funding.

Deadline to apply: May 1, 2023.

THE 2022 CANNT BURSARY, AWARD, AND RESEARCH GRANT WINNERS

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Franca Tantalo Bursary Award Sponsored by Fresenius Medical Care

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2022 CANNT Journal Award – Supported by CANNT

A standardized approach for the post-operative management of hypocalcemia in dialysis patients with secondary hyperparathyroidism requiring parathyroidectomy
(CANNT Journal, 2022, 31[4], 11–20)

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Maria Harlow-Gillighan, BSc Neuroscience, BSc Pharm
Benjamin Taylor, MD, FRCSC
Marsha Wood, MN
Carolyn Bartol, BScN, RN, CNeph(C)
Steven Soroka, BMus, MD, MSc, FRCPC
Kenneth West, MD, FRCPC
Jo-Anne S. Wilson, BSc Pharm, ACPR, PharmD
(Halifax, Nova Scotia)

Jaclyn Tran, BSc Pharm, ACPR