

Selected abstracts from the 24th Biennial WCET® Congress in Glasgow, UK

Delegates at the WCET® Congress, in Glasgow, UK in September, were treated to a very successful scientific programme with diverse, stimulating and high-quality content.

For the benefit of the many members who were unable to attend, here is a sample of what was presented by speakers from around the world.

DOI <https://doi.org/10.33235/wcet.44.4.39-47>

MANAGING LOW ANTERIOR RESECTION SYNDROME

Jennie Burch, RN, BSc, MSc

Head of Gastrointestinal Nurse Education, St Mark's Hospital, London, UK

Claire Taylor, RGN, PhD

Chief Nursing Officer, Macmillan, UK

Ana Wilson, MD

Consultant Gastroenterologist, St Mark's Hospital, London, UK

Christine Norton, RGN, PhD

Professor of Nursing, King's College London, UK

Aims/Objectives The presentation aim is to describe nursing management of bowel symptoms occurring after rectal cancer treatment. The objectives are to improve nurses' knowledge and confidence when caring for this patient group.

Purpose & Background It is known, worldwide each year an estimated million people are diagnosed with rectal cancer (Emmertsen & Laurberg, 2013). Rectal cancer treatment is commonly surgery, chemotherapy and radiotherapy which can potentially result in consequences such as bowel dysfunction, collectively termed low anterior resection syndrome or LARS (Keane et al. 2020). The purpose of this presentation will be to increase knowledge about managing LARS after rectal cancer surgery.

Methods A PhD was undertaken using a multi-phase, mixed-method design to investigate LARS management. A systematic review thematically summarised how rectal cancer treatment consequences affect quality of life. A scoping review charted treatments available to manage LARS. Interviews thematically described what patients need to manage LARS. Focus groups with both patients and clinicians thematically described how this might be achieved.

Results Results reveal quality of life can be negatively affected by LARS, particularly when people could not function in their chosen roles (Burch et al, 2021a). Multiple LARS management options exist but empirical data are limited (Burch et al, 2021b). Patients need knowledgeable clinicians to enquire about and revisit symptoms; providing information on management strategies and signposting to other relevant information (Burch et al, 2023a). Clinicians can help set expectations to enable realistic goal planning (Burch et al, 2023b). Nurse-led supported LARS management can improve bowel symptoms in conjunction with supplementary information.

Conclusion/Outcome In conclusion, a greater knowledge about LARS should increase nurses' confidence to assist patients with rectal cancer to manage their bowel symptoms after rectal cancer treatment. More research is needed to understand how best to provide nurse-led LARS interventions.

Keywords LARS, low anterior resection syndrome, rectal cancer, nurse, survivorship

References

- Burch J., Taylor C., Wilson A., Norton C. (2021a) Symptoms affecting quality of life after sphincter-saving rectal cancer surgery: a systematic review. *European Journal of Oncology Nursing*, 52.
- Burch J., Swatton A., Taylor C., Wilson A., Norton C. (2021b) Managing bowel symptoms after sphincter-saving rectal cancer surgery: a scoping review. *Journal of Pain and Symptom Management* 62(6), 1295-1307.
- Burch J., Wright J., Taylor C., Wilson A., Norton C. (2023a) "He's a surgeon, like I'm not going to waste his time": interviews to determine healthcare needs for patients with low anterior resection syndrome (LARS) after rectal cancer surgery. *Colorectal Disease* 25, 880-887.
- Burch J., Taylor C., Wilson A., Norton C. (2023b) "You're just on your own": Exploring bowel symptom management needs after rectal cancer surgery through patient and clinician focus groups. *European Journal Oncology Nursing*. <https://doi.org/10.1016/j.ejon.2023.102406>.
- Emmertsen K.J., Laurberg S. (2013) Impact of bowel dysfunction on quality of life after sphincter-saving resection for rectal cancer. *British Journal of Surgery* 100(10), 1377-1387.
- Keane C., Fearnhead N.S., Bordeianou L.G., Christensen P., Basany E.E., Laurberg S., Mellgren A., Messick C., Orangio G.R., Verjee A., Wing K., Bissett I. (2020) International consensus definition of low anterior resection syndrome. *Diseases of the Colon & Rectum* 63(3), 274-284.

ALL MY LIFE I HAVE TO ADAPT WITH MY STOMA: A PHENOMENOLOGICAL STUDY

Ria Andjarwati, MD, ONS, ETN,

Head Nurse, Wound and Stoma Consultant, Oncology Nurse Specialist, National Cancer Center "dharmais" Hospital, Indonesia

Yati Afiyanti, Prof. PhD. MN

Honorary Lecture in Nursing Faculty University of Indonesia, University of Indonesia, Indonesia

Aims/Objectives The purpose of this study was to describe the experiences of cancer patients who had a stoma in the first year. A qualitative descriptive study was conducted.

Purpose & Background Cancer patients who undergo stoma surgery experience a major life change. Many problems arise both physically, psychologically, sexually and spiritually, especially in the first year. Delayed discharge planning in out-of-hospital settings, often happens to new ostomates, because of poor pre-operative education and information. By exploring patients' experiences throughout the difficult time with stoma surgery, health care providers can understand and empower the patients with the right care.

Methods Eleven participants were invited for semi-structured in-depth interviews. Data were analysed using thematic analysis.

Results Two themes were identified: 1) Complaints experienced while undergoing therapy; 2). Adaptation to life after stoma. Ostomates facing a major life changes due to adapting to life with the stoma. Many aspects in ostomates' live need to be adjusted, Feelings of rejection and denial rise up in approximately the first month after stoma surgery. Adjustment followed by adaptation finally acknowledged by the ostomate entering six month above.

Conclusion/Outcome This study provides nurses and others with insight in to the experiences of Indonesian ostomates about their adaptation processes physically, psychologically, socially, spiritually and sexually, and their plans for their future lives with stoma. It is very useful for patients with colorectal cancer or other cancers who undergo a life with a stoma attached.

Keywords cancer patients, experience, ostomate, postoperative, stoma

References

- Alenezi A, McGrath I, Kimpton A, Livesay K. Quality of life among ostomy patients: A narrative literature review. *J Clin Nurs*. 2021;30(21-22):3111-3123. doi:10.1111/jocn.15840
- Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I BF. International Agency for Research on Cancer 2020. *Glob Cancer Obs Cancer Today*. 2020;419:1-2.
- Kugler CM, Breuing J, Rombey T, et al. The effect of preoperative stoma site marking on risk of stoma-related complications in patients with intestinal ostomy—protocol of a systematic review and meta-analysis. *Syst Rev*. 2021;10(1):1-8. doi:10.1186/s13643-021-01684-8
- Summers MC. The Effect of Ostomate-to-Ostomate Support on Psychosocial Adaptation to Stoma. *Dr Nurs Pract Capstone Proj*. 2018;28.
- Burch J. Post-discharge care for patients following stoma formation: what the nurse needs to know. *Nurs Stand*. 2017;31(51):41-45. doi:10.7748/ns.2017.e10198
- Capilla-Díaz C, Bonill-de las Nieves C, Hernández-Zambrano SM, et al. Living With an Intestinal Stoma: A Qualitative Systematic Review. *Qual Health Res*. 2019;29(9):1255-1265. doi:10.1177/1049732318820933
- Vonk-Klaassen SM, de Vocht HM, den Ouden MEM, Eddes EH, Schuurmans MJ. Ostomy-related problems and their impact on quality of life of colorectal cancer ostomates: a systematic review. *Qual Life Res*. 2016;25(1):125-133. doi:10.1007/s11136-015-1050-3
- Hahne J, Liang T, Khoshnood K, Wang X, Li X. Breaking bad news about cancer in China: Concerns and conflicts faced by doctors deciding whether to inform patients. *Patient Educ Couns*. 2020;103(2):286-291. doi:10.1016/j.pec.2019.08.022
- de Almeida Silva K, Duarte AX, Cruz AR, de Araújo LB, das Graças Pena G. Time after ostomy surgery and type of treatment are associated with quality of life changes in colorectal cancer patients with colostomy. *PLoS One*. 2020;15(12):1-17. doi:10.1371/JOURNAL.PONE.0239201

10. Dibley L, Czuber-Dochan W, Wade T, et al. Patient Decision-Making about Emergency and Planned Stoma Surgery for IBD: A Qualitative Exploration of Patient and Clinician Perspectives. *Inflamm Bowel Dis.* 2018;24(2):235-246. doi:10.1093/ibd/izx043
11. Cross AJ, Wooldrage K, Robbins EC, et al. Whole-colon investigation vs. flexible sigmoidoscopy for suspected colorectal cancer based on presenting symptoms and signs: a multicentre cohort study. *Br J Cancer.* 2019;120(2):154-164. doi:10.1038/s41416-018-0335-z
12. Jin Y, Zhang J, Zheng MC, Bu XQ, Zhang JE. Psychosocial behaviour reactions, psychosocial needs, anxiety and depression among patients with rectal cancer before and after colostomy surgery: A longitudinal study. *J Clin Nurs.* 2019;28(19-20):3547-3555. doi:10.1111/jocn.14946
13. Jayarajah U, Samarasekera DN. Psychological adaptation to alteration of body image among stoma patients: A descriptive study. *Indian J Psychol Med.* 2017;39(1):63-68. doi:10.4103/0253-7176.198944
14. Tiranda Y, Siripul P, Sangchart B, Septiwi C. Perspectives of adult survivors of colorectal cancer with an ostomy on their needs: Synthesis of qualitative research studies. *Cent Eur J Nurs Midwifery.* 2019;10(4):1155-1166. doi:10.15452/CEJNM.2019.10.0027
15. Rafiei H, Hosseinzadeh K, Hoseinabadi-Farahani MJ, et al. The relationship between psychological health and spiritual wellbeing in Iranian stoma patients. *Gastrointest Nurs.* 2019;17:S18-S22. doi:10.12968/gasn.2019.17.Sup5.S18
16. Rafiei H, Hoseinabadi-Farahani MJ, Aghaei S, Hosseinzadeh K, Naseh L, Heidari M. The prevalence of psychological problems among ostomy patients: A cross-sectional study from Iran. *Gastrointest Nurs.* 2017;15(2):39-44. doi:10.12968/gasn.2017.15.2.39
17. Choudhary M, Kaur H. Experiences of living with intestinal ostomy: A qualitative meta-synthesis. *Indian J Palliat Care.* 2020;26(4):421-427. doi:10.4103/IJPC.IJPC_21_20
- 18.ingan MJ, Kump K. Getting Ready for Ostomy Certification. *J Wound, Ostomy Cont Nurs.* 2022;49(3):290-293. doi:10.1097/won.0000000000000872
19. Kirkland-Kyhn H, Martin S, Zaratkiewicz S, Whitmore M, Young HM. Ostomy Care at Home educating family caregivers on stoma management and potencial complications. *Am J Nurs.* 2018;118(4):63-68. <https://nursing.ceconnection.com/ovidfiles/00000446-201804000-00035.pdf?sessionid=E5B7110C68566021C914937447205896>
20. Marínez AC, Bock D, Carlsson E, et al. Stoma-related complications: a report from the Stoma-Const randomized controlled trial. *Color Dis.* 2021;23(5):1091-1101. doi:10.1111/codi.15494
21. Bulkley JE, McMullen CK, Grant M, Wendel C, Hornbrook MC, Krouse RS. Ongoing ostomy self-care challenges of long-term rectal cancer survivors. *Support Care Cancer.* 2018;26(11):3933-3939. doi:10.1007/s00520-018-4268-0
22. Stelton S. CE: Stoma and Peristomal Skin Care: A Clinical Review. *Am J Nurs.* 2019;119(6):38-45. doi:10.1097/01.NAJ.000059781.86311.64
23. Correa Marínez A, Bock D, Carlsson E, et al. Stoma-related complications: a report from the Stoma-Const randomized controlled trial. *Color Dis.* 2021;23(5):1091-1101. doi:10.1111/codi.15494
24. Rowe KM, Schiller LR. Ileostomy diarrhea: Pathophysiology and management. *Baylor Univ Med Cent Proc.* 2020;33(2):218-226. doi:10.1080/08998280.2020.1712926
25. Alenezi A, McGrath I, Kimpton A, Livesay karen. Quality of life among ostomy patients: A narrative literature review. *J Clin Nurs.* 2021;30(21-22):3111-3123. doi:10.1111/JOCN.15840
26. Nam KH, Kim HY, Kim JH, Kang KN, Na SY, Han BH. Effects of social support and self-efficacy on the psychosocial adjustment of Korean ostomy patients. *Int Wound J.* 2019;16(October 2018):13-20. doi:10.1111/iwj.13038
27. García-Rodríguez MT, Barreiro-Trillo A, Seijo-Bestilleiro R, González-Martin C. Sexual dysfunction in ostomized patients: A systematized review. *Healthc.* 2021;9(5):1-11. doi:10.3390/healthcare9050520
28. Zhang Y, Xian H, Yang Y, Zhang X, Wang X. Relationship between psychosocial adaptation and health-related quality of life of patients with stoma: A descriptive, cross-sectional study. *J Clin Nurs.* 2019;28(15-16):2880-2888. doi:10.1111/jocn.14876
29. Sarabi N, Navipour H, Mohammadi E. Sexual Performance and Reproductive Health of Patients with an Ostomy: A Qualitative Content Analysis. *Sex Disabil.* 2017;35(2):171-183. doi:10.1007/S11195-017-9483-Y
30. Moreira WC, Vera SO da, Sousa GN de, Araújo SNM, Damasceno CKCS, Andrade EMLR. Sexualidade de pacientes com estomias intestinais de eliminação Sexuality of patients with bowel elimination ostomy. *Rev Pesqui Cuid é Fundam Online.* 2017;9(2):495-502. doi:10.9789/2175-5361.2017.v9i2.495-502
31. Kandemir D, Oskay Ü. Sexual Problems of Patients with Urostomy: A Qualitative Study. *Sex Disabil.* 2017;35(3):331-340. doi:10.1007/s11195-017-9494-8
32. Medina-Rico M, Zárate-Velasco AM, Quiñonez A, López-Ramos H. Sexuality in People With Ostomies: A Literature Review. *Sex Disabil.* 2019;37(4):571-586. doi:10.1007/s11195-019-09604-4
33. Habib A, Connor MJ, Boxall NE, Lamb BW, Miah S. Improving quality of life for Muslim patients requiring a stoma: A critical review of theological and psychosocial issues. *Surg Pract.* 2020;24(1):29-36. doi:10.1111/1744-1633.12409
34. Bulkley J, McMullen CK, Hornbrook MC, et al. Spiritual well-being in long-term colorectal cancer survivors with ostomies. *Psychooncology.* 2013;22(11):2513-2521. doi:10.1002/pon.3318

DEFINING THE HIGH OUTPUT STOMA

Michelle Carr, BNursing, GradCertSTN, MCLinNurs(Wound), MNursingSc(NP)
Nurse Practitioner, Wound Management/Stomal Therapy, Sunshine Coast University Hospital, Australia

Paris E. Purnell, RN STN MBA
Senior Manager , Global Clinical Education APAC, Hollister Incorporated, Illinois, US

Aims/Objectives To offer a new definition of the High Output Stoma (HOS) that encompasses all aspects of the phenomenon that is relevant to all health disciplines. To encourage consistency in terminology across all disciplines managing the patient with a HOS. To provide a platform from which further research into HOS can be conducted.

Purpose & Background HOS patients are at risk of developing complications leading to increased morbidity, mortality, reduced quality of life, increased length of hospital stays, and frequent hospital readmissions.^{1,5,6,7,8, 10} While the literature is paying increasing attention to the management of HOS, there are many elements of this condition that are yet to be researched in depth, for example, the incidence of HOS, health outcomes, financial cost to the health system and social cost to the community. Most interestingly, consensus has yet to be reached on what defines a HOS: the definition varies within and across the disciplines, and the principles underpinning the definitions are not fully described.^{1,2,3,4,5}

Methods Representing several countries, the authors undertook an extensive literature review, to understand the variety of definitions described, patient characteristics, and the aetiologies that influence the output of a stoma in order to gain a consensus for providing a new definition of a HOS that incorporates parameters such as the volume of output, time frames, anatomical variations, and biochemical markers.

Results The resulting definition will be shared at the Congress with a view to it gaining acceptance as the new standard global definition.

Conclusion/Outcome An accurate and clear definition of HOS should form the cornerstone for further discussion and research into the phenomenon allowing useful conclusions to be drawn that are relevant and consistent for promoting evidence-based practices, that ultimately benefits the patient with HOS.

Keywords high output, stoma, definition, ostomy

References

1. Goodey & Colman, 2016, 'Safe management of ileostomates with high-output stomas,' *British Journal of Nursing*, 25(17):1–5.
2. Baker ML, Williams, RN & Nightingale, JM, 2011, 'Causes and management of a high-output stoma,' *Colorectal Diseases*, 13(2):191–197.
3. McDonald A, 2014, 'Orchestrating the management of patients with high output stomas,' *British Journal of Nursing*, 23(12):645–649.
4. ASCN Stoma Care, Clinical Guidelines 2016, pp. 21-25.
5. Mountford CG, Manas DM, Thompson NP. A practical approach to the management of high-output stoma. *Frontline Gastroenterol*. 2014 Jul;5(3):203-207. doi: 10.1136/flgastro-2013-100375. Epub 2013 Oct 31. PMID: 28839771; PMCID: PMC5369744.
6. Lee YJ, Kweon, MR & Park, M. 'Nutritional management of a patient with a high-output stoma after extensive small bowel resection to treat Crohn's disease,' *Clinical Nutrition Research*, 2019. 8(3):247–253.
7. Nasser, R, Parrish, CR, & Bridges, M. 'High output ileostomies: The stakes are higher than the output,' 2019. *Practical Gastroenterology*, XLIII(9): 20-33.
8. Chen, SY, Stem, M, Cerullo, M, Canner, JK, Gearhart, SL, Safar, B, Fang, SH & Efron, JE. 'Predicting the risk of readmission from dehydration after ileostomy formation: The DRIP score,' 2018. *Diseases of Colon & Rectum*, 61(12):1410–1417.

WAR, WEATHER, WEAPONS AND WOUNDS: W4

Michele R. Burdette-Taylor, PhD, MSN, RN, CWCN, CFCN, NPD-BC, LTC-R
Associate Professor, Saint Martin University, Washington, US

Aims/Objectives Identify intervention/s of foot and wound care in the 19th that influenced 21st century practices. Isolate the evolution of military combat and wound care according to types of weapons over time and weather-related injuries. Discuss the science "silver linings" of war and combat for development of technology, products, adjunctive/advanced therapies, and devices.

Purpose & Background To share the evidence-based research highlighted with personal and professional experience. As a retired military nurse who focused on wound care during Persian Gulf, Operation Enduring Freedom, Operation Iraqi Freedom and recently Ukraine and Israel Wars, this presentation is provides a unique opportunity to share for the ostomy and wound care colleagues world-wide. As a Nightingale Scholar investigating the military medical system interventions during the Crimean War and as a nurse passionate about the history of health and welfare of soldier. The purpose is to link the history of combat injuries related to weapons, weather-related issues and at-the-moment in time standard wound care management.

Methods Integrative review conducted of the historical, seminal, and current evidence to support how wound care nurses may utilise military interventions to facilitate successful healing in the civilian sector.

Results The extensive review of the literature results focused on the development of products, devices, adjunctive and advanced technologies to improve healing rates, reduce severity of amputations, and wounds. Since the Crimean War many inventions and interventions have evolved have been developed to facilitate healing of soldiers, while reducing morbidity and mortality.

Conclusion/Outcome Understanding the history allows for improvement of care while avoiding same or similar mistakes. Sharing with providers “how we got to where we are today” provides an enlightened ah-ha moment for ostomy and wound care nursing, from a five decade career in military and civilian wound care arenas.

Keywords adjunctive munitions, x-rays, antibiotics, communication

References

- Enloe, C. (2019). Wounds: militarized nursing, feminist curiosity, and unending war. *International Relations*, 33, 393-412.
- Gumeniuk, K., Lurin, I.A., Tsema, I., Malynovska, L., Gorobeiko, M. & Dinets, A. (2023). Gunshot injury to the colon by expanding bullets in combat patients wounded in hybrid period of the Russian-Ukrainian war during 2014-2020. *BMC Surgery*, <https://doi.org/10.1186/s12893-023-01919-6>
- Manring, M., Hawk, A. & Calhoun, J.H. (2009). Treatment of war wounds. *Clinical Orthopedic Relations Research*, 467, 2168-2191.
- Nightingale, F. (1858). Notes on hospitals. John W. Parker and Son, West Strand, UK. - 2 papers read at the National Association for the Promotion of Social Science in Liverpool
- Nightingale, F. (1858). Notes on matters on the health, efficiency, and hospital administration of the British Army founded chiefly on the experience of the late war. London; 860 pages, 1000 copies distributed.
- Nightingale, F. (1860). Notes on nursing, what it is and what it is not. Pacific Publishing Studio by Madison Park, www.PacPS.com
- Protas, M., Schumacher, M. Iwanaga, J., Yilmaz, E., Oskoulun, R.J. & Tubbs, S. (2018). Treatment of gunshot wounds to spine during late 19th century. *World European Surgery*, 115, 285-287.

Life with a long-term stoma across five European countries

Marianne Krogsgaard, PhD, Associate Professor

Clinical Nurse Specialist, Department of Surgery, Center for Surgical Science, Zealand University Hospital, Koege, Denmark;

Department of People and Technology, Roskilde University, Denmark

Helle Kristensen, PhD MD

Department of Surgery, Aarhus University Hospital; Danish Cancer Society Centre for Research on Survivorship and Late Adverse Effects After Cancer in the Pelvic Organs, Denmark

Peter Christensen, Professor MD

Department of Surgery, Aarhus University Hospital; Danish Cancer Society Centre for Research on Survivorship and Late Adverse Effects After Cancer in the Pelvic Organs, Denmark

Aims/Objectives To examine the prevalence and impact of stoma-related problems on patients' everyday life

Purpose & Background Follow-up policies are changing throughout the world in order to personalise follow-up to those patients most in need. Concurrently, a high prevalence of late effects following colorectal cancer surgery has been revealed. For stoma nurses to design future follow-up care for patients with a long-term stoma after rectal cancer, knowledge of the prevalence, type, and impact of stoma-related problems on patients' everyday lives is needed. Such knowledge is lacking.

Methods We performed a cross-sectional study across five European countries on 2262 long-term survivors using validated patient-reported outcome measures. Stoma problems' association with restrictions in everyday life was calculated using multivariable regression analysis that adjusted for potential confounding factors.

Results Stoma-related problems were highly prevalent 5.4 (IQR 3.8-7.6) years after stoma surgery; leakage from stoma onto skin (58%), troublesome odour (55%), skin problems (27%), and pain at stoma site (21%). Almost one in five patients (19%) was restricted in everyday life due to the stoma. Experiencing odour and leakage ≥ 1 per week, skin problems, and change frequency of stoma bag >4 times daily were significantly associated with restrictions.

Conclusion/Outcome A high prevalence of morbidity of colostomies was reported by patients. To potentially help patients restricted in everyday life, easy and swift access to stoma care nurses is warranted. Annual surveys or screening of stoma function and problems could be the first step towards long-term follow-up after stoma formation.

Keywords Rectal cancer, long-term survivor, stoma care, symptoms, daily living

WHEN UNPREPARED FOR THE EMERGENCE OF A PARASTOMAL BULGE – A QUALITATIVE STUDY

Marianne Krogsgaard, PhD, Associate Professor

Clinical Nurse Specialist, Department of Surgery, Center for Surgical Science, Zealand University Hospital, Koege, Denmark;
Department of People and Technology, Roskilde University, Denmark

Pia Dreyer, Professor

Clinical Nurse Specialist, Department of Anaesthesiology and Intensive Care, Aarhus University Hospital, Denmark ; Department of Public Health, Section of Nursing Science, Aarhus University, Denmark

Thordis Thomsen, Professor

Department of Anaesthesiology, Herlev Hospital, University of Copenhagen, Denmark; Department of Clinical Medicine, Faculty of Health Sciences, University of Copenhagen, Denmark

Aims/Objectives To investigate patients' experiences of being prepared for the emergence of a parastomal bulge in relation to a stoma.

Purpose & Background Parastomal bulging has a significant impact on patients' lives. We have limited information from the patient's perspective on the information provided on parastomal bulging.

Methods Qualitative interviews with 20 patients participating in five focus groups. Analysis was performed using a three-phased phenomenological-hermeneutic approach inspired by Paul Ricoeur.

Results The unforeseen bulge gave rise to increasing concerns and worry about the cause and consequences of the bulging skin. Patients sought explanations in their own lives. In this way, one's own behaviour or previous illness such as influenza, coughing, and efforts to rehabilitate after surgery, were suspected to have induced the bulge. Patients were under the impression that healthcare professionals knew about preventive interventions that patients were not informed about. Missing or conflicting information led to counterproductive behaviour and patients unknowingly carried on with hard and strenuous work after stoma surgery, a behaviour they would have refrained from had they known about the bulge. Patients were disappointed with healthcare professionals due to the lack of information. As patients found the bulge hard to live with, they sought the surgeon's opinion and advice on surgical repair. Some patients were reassured not to undergo surgery and got on with their lives. Others were left with little hope of change.

Conclusion/Outcome Lack of information may lead to mistrust and disappointment with healthcare professionals. Addressing patients' individual support needs and information needs is important to preserve patient autonomy and well-being. Surgeons and stoma nurses should be aware of the impact of their approach to communicating with patients about parastomal bulging.

Keywords parastomal bulge, hernia, information, preparation, qualitative

References

Krogsgaard M, Dreyer P, Thomsen T. Understanding patients' perspectives when unprepared for the emergence of a parastomal bulge—a qualitative study. *Colorectal Dis.* 2023;00:1–8. <https://doi.org/10.1111/codi.16750>

EFFECTIVENESS AND SAFETY OF NEGATIVE PRESSURE WOUND THERAPY ON MELANOMA-RESECTED SURGICAL WOUNDS

Kyoung Ae NAM

Wound Care Specialist, Yonsei University Severence Hospital, South Korea

Aims/Objectives Negative pressure wound therapy (NPWT), a wound dressing system that provides sub-atmospheric pressure throughout the wound site, promotes wound healing, and reduces surgical complications. Although it is contraindicated in malignant wounds due to the potential risk of tumorigenesis, the evidence is limited.

Purpose & Background To compare tumor recurrence and wound healing performance, and surgical complications to provide evidence for the use of NPWT on melanoma-resected wounds.

Methods We retrospectively reviewed the medical records of 232 patients who were histopathologically diagnosed with acral lentiginous melanoma without nodal and distant metastasis between Jan 2006–Feb 2020. In all 179 patients received NPWT, and 53 patients received conventional surgical dressing.

Results Fifty one (28.5%) patients in the NPWT group had recurrence, of which 18 (10.1%) were local recurrence, 17 (32.1%) patients who received conventional surgical dressing had recurrence, of which 5 (9.4%) was local recurrence. There were no significant differences in recurrence-free survival between both group (Log rank test, P=0.701). Patients who received NPWT with

skin grafting showed significantly faster wound healing compared to those who received conventional surgical dressing alone, and NPWT without skin grafting ($P < 0.001$). Patients who received NPWT had lower surgical site infection rate than conventional surgical dressing (15.1% vs 28.3%, $P = 0.028$).

Conclusion/Outcome NPWT does not significantly increase tumor recurrence in melanoma-resected wounds. Compared to conventional surgical dressing, NPWT offers several advantages in promoting wound healing and reducing surgical site infection.

Keywords negative pressure wound therapy (NPWT), melanoma-resected surgical wounds

References

1. Venturi ML, Attinger CE, Mesbahi AN, Hess CL, Graw KS. Mechanisms and clinical applications of the vacuum-assisted closure (VAC) Device: a review. *Am J Clin Dermatol* 2005;6:185-94.
2. Normandin S, Safran T, Winocour S, Chu CK, Vorstenbosch J, Murphy AM et al. Negative Pressure Wound Therapy: Mechanism of Action and Clinical Applications. *Semin Plast Surg* 2021;35:164-70.
3. Wang YJ, Yao XF, Lin YS, Wang JY, Chang CC. Oncologic feasibility for negative pressure wound therapy application in surgical wounds: A meta-analysis. *Int Wound J* 2022;19:573-82.
4. Hays TR, Singh G, Saragossi J, Park J, Shekar S, Marquez JE et al. Negative-Pressure Wound Therapy versus Standard Surgical Dressings after Malignant Tumor Resection: A Systematic Review and Meta-Analysis. *Plast Reconstr Surg* 2022;150:655e-70e.
5. Andrades P, Figueroa M, Sepúlveda S, Benitez S, Erazo C, Danilla S. Tumor Recurrence after Negative Pressure Wound Therapy: An Alert Call. *Case Reports in Clinical Medicine* 2014;03:350-2.
6. Cai SS, Gowda AU, Alexander RH, Silverman RP, Goldberg NH, Rasko YM. Use of negative pressure wound therapy on malignant wounds - a case report and review of literature. *Int Wound J* 2017;14:661-5.
7. Putri IL, Adzalika LB, Pramanasari R, Wungu CDK. Negative pressure wound therapy versus conventional wound care in cancer surgical wounds: A meta-analysis of observational studies and randomised controlled trials. *Int Wound J* 2022;19:1578-93.
8. Pflibsen LR, Lettieri SC, Kruger EA, Rebecca AM, Teven CM. Negative Pressure Wound Therapy in Malignancy: Always an Absolute Contraindication? *Plast Reconstr Surg Glob Open* 2020;8:e3007.
9. Oh BH, Lee SH, Nam KA, Lee HB, Chung KY. Comparison of negative pressure wound therapy and secondary intention healing after excision of acral lentiginous melanoma on the foot. *Br J Dermatol* 2013;168:333-8.
10. Mendez-Eastman S. Guidelines for Using Negative Pressure Wound Therapy. *Advances in Skin & Wound Care* 2001;14:314-23.

NEGATIVE PRESSURE WOUND THERAPY FOR COLORECTAL INCISIONS: A SYSTEMATIC REVIEW AND META-ANALYSIS OF CONTROLLED TRIALS

Ting-Kuang Wang

Nurse practitioner, Wan Fang Hospital, Taipei Medical University, Taipei, Taiwan

Chien-Hsin Chen M.D.

Wan Fang Hospital, Taipei Medical University, Taipei, Taiwan

Kee-Hsin Chen

Assistant Professor, Post-Baccalaureate Program in Nursing, College of Nursing, Taipei Medical University, Taipei, Taiwan

Chieh-feng Chen M.D., Ph. D.

Taipei Medical University, Taipei, Taiwan

Aims/Objectives Colorectal surgery carries a significantly higher risk of wound infection, showing an eightfold increase in adverse events compared to alternative procedures. Despite the growing popularity of minimally invasive approaches, open surgery remains the standard, particularly in complex conditions. Our study aims to evaluate the efficacy and safety of NPWT for colorectal incisions.

Purpose & Background Negative pressure wound therapy (NPWT) has demonstrated promising results for reducing surgical site infection (SSI) rates after orthopedic, vascular, cardiothoracic, plastic, and abdominal surgery. The literature on NPWT for colorectal incisions is growing, with several randomised controlled trials (RCTs), but findings have been inconsistent.

Methods The Cochrane Central Register of Controlled Trials, PubMed, EMBASE, Cumulative Index to Nursing and Allied Health Literature, and ClinicalTrials.gov databases were searched for RCTs and non-randomised controlled trials (non-RCTs) comparing NPWT and standard care.

Results Five RCTs and six non-RCTs were included ($n = 2,193$). NPWT significantly reduced the rate of infection in colorectal incisions (odds ratio [OR], 0.57; 95% confidence interval [CI], 0.41 to 0.78; $I^2 = 14\%$; $p < 0.0005$) and wound complications (OR, 0.33; 95% CI, 0.13 to 0.88; $I^2 = 59\%$; $p = 0.03$). NPWT also shortened the wound healing time by 3 days (mean difference, -2.98 ; 95% CI, -4.99 to -0.97 ; $I^2 = 0\%$; $p = 0.004$). Subgroup analysis revealed that NPWT conferred greater benefits on wounds resulting from life-threatening emergency surgery and contaminated or dirty wounds.

Conclusion/Outcome NPWT is an effective intervention for the closure of wounds in patients after colorectal surgery, that significant reduction of SSI, overall wound complications, mean complete wound healing time, and more effectively in emergency, and contaminated to dirty wounds. Treatment options should be considered in terms of cost benefits and adequate patient selection during shared decision-making.

Keywords negative pressure wound therapy, colorectal surgery, systematic review, meta-analysis

References

- Murphy P, Lee K, Dubois L, et al. Negative pressure wound therapy for high-risk wounds in lower extremity revascularization: study protocol for a randomized controlled trial. *Trials*. 2015;16:504.
- Gomoll AH, Lin A, Harris MB. Incisional Vacuum-Assisted Closure Therapy. *Journal of orthopaedic trauma*. 2006;20(10):705-709.
- Fowler AL, Barry MK. Closed incision negative pressure therapy: Results of recent trials and recommendations for clinical practice. *Surgeon*. 2020;18(4):241-250.
- O'Leary DP, Peirce C, Anglim B, et al. Prophylactic Negative Pressure Dressing Use in Closed Laparotomy Wounds Following Abdominal Operations: A Randomized, Controlled, Open-label Trial: The P.I.C.O. Trial. *Annals of surgery*. 2017;265(6):1082-1086.
- Shen P, Blackham AU, Lewis S, et al. Phase II Randomized Trial of Negative-Pressure Wound Therapy to Decrease Surgical Site Infection in Patients Undergoing Laparotomy for Gastrointestinal, Pancreatic, and Peritoneal Surface Malignancies. *J Am Coll Surg*. 2017;224(4):726-737.

PREVALENCE AND RISK FACTORS OF MULTIDRUG-RESISTANT BACTERIA INFECTION IN PATIENTS WITH AUTOIMMUNE BULLOUS DISEASE

Lei Guo

Nurse-in-charge, Hospital of Skin Diseases, Chinese Academy of Medical Sciences, China

Aims/Objectives Aim to summarise the prevalence and risk factors for multidrug-resistant bacteria (MDROs) infections of patients with autoimmune bullous disease (AIBD). In order to provide basis for the formulation of clinical prevention and nursing programs.

Purpose & Background The occurrence of infection in AIBD has a great negative impact on the treatment and control of the primary disease. Studies generally believed that the drug resistance rate of bacteria has been increasing in recent years, and the emergence of multi-drug resistant bacteria such as MRSA is not conducive to the control of subsequent wound infection. There is a lack of research on the high risk factors of skin infection with multi-drug resistant bacteria in patients with all autoimmune bullous diseases.

Methods A retrospective study was conducted to collect the information of 271 hospitalised patients with AIBD. Univariate and binary logistic regression were used to analyze the independent risk factors of multidrug-resistant bacteria infection in patients.

Results 440 patients with AIBD were treated within 3 years. The bacterial culture rate was 72.7% and the positive rate was 55.7%. 74 patients were infected with multi-drug resistant bacteria. Staphylococcus and Enterobacter were the main bacterial groups with multi-drug resistance, accounting for 75.9% and 13.9% respectively. There were statistically significant differences in the length of hospitalization, severity, self-modification of dosage, external use of antibiotic ointment, use of immunosuppressant, duration of glucocorticoids use, maximum dose of glucocorticoids and albumin value at the first admission between the two groups ($P < 0.05$). Regression analysis showed that external use of antibiotic ointment, use of immunosuppressants, maximum dose of glucocorticoids and self-modification were independent risk factors for multidrug-resistant bacterial infection.

Conclusion/Outcome AIBD patients are prone to MDROs infections, with Staphylococcus being the most common multi-drug resistant pathogen. Topical antibiotic ointment, large use of immunosuppressants and glucocorticoids, self-modification of dosage will increase the risk of MDROs infection.

Keywords autoimmune bullous disease, wound Infection, multidrug-resistant

References

1. Kutlubay Z, Sevim Keçici A, Çelik U et al. A survey of bullous diseases in a Turkish university hospital: clinicoepidemiological characteristics and follow-up. *Turkish Journal Of Medical Sciences*, 2021,51(1):124-133. DOI:10.3906/sag-2006-231.
2. Chams-Davatchi C, Valikhani M, Daneshpazhooh M, et al. Pemphigus: analysis of 1209 cases. *Int J Dermatol*, 2005,44(6):470-476.. DOI:10.1111/j.1365-4632.2004.02501.x.
3. Forsti A K, Jokelainen J, Timonen M, et al. Increasing incidence of bullous pemphigoid in Northern Finland: a retrospective database study in Oulu University Hospital. *Br J Dermatol*, 2014,171(5):1223-1226. DOI:10.1111/bjd.13189.
4. Amber K T, Murrell D F, Schmidt E, et al. Autoimmune Subepidermal Bullous Diseases of the Skin and Mucosae: Clinical Features, Diagnosis, and Management. *Clinical Reviews in Allergy & Immunology*, 2018,54(1):26-51. DOI:10.1007/s12016-017-8633-4.
5. Morin C, Fardet L. Systemic glucocorticoid therapy: risk factors for reported adverse events and beliefs about the drug. A cross-sectional online survey of 820 patients. *Clinical Rheumatology*, 2015,34(12):2119-2126. DOI:10.1007/s10067-015-2953-7.

6. Ferri M, Ranucci E, Romagnoli P, et al. Antimicrobial resistance: A global emerging threat to public health systems. *Crit Rev Food Sci Nutr*, 2017,57(13):2857-2876. DOI:10.1080/10408398.2015.1077192.
7. van Duin D, Paterson D L. Multidrug-Resistant Bacteria in the Community. *Infectious Disease Clinics of North America*, 2020,34(4):709-722. DOI:10.1016/j.idc.2020.08.002.
8. Miodovnik M, Künstner A, Langan E A, et al. A distinct cutaneous microbiota profile in autoimmune bullous disease patients. *Experimental Dermatology*, 2017,26(12):1221-1227. DOI:10.1111/exd.13357.
9. Swanson T, Ousey K, Haesler E, et al. IWII Wound Infection in Clinical Practice consensus document: 2022 update. *J Wound Care*, 2022,31(Sup12):S10-S21. DOI: 10.12968/jowc.2022.31.Sup12.S10.
10. Zhang H, Yang Q, Liao K, et al. Update of incidence and antimicrobial susceptibility trends of *Escherichia coli* and *Klebsiella pneumoniae* isolates from Chinese intra-abdominal infection patients. *BMC Infectious Diseases*, 2017,17(1). DOI:10.1186/s12879-017-2873-z.
11. Sowole L, Ming D K, Davies F. Multidrug-resistant bacteria. *Br J Hosp Med (Lond)*, 2018,79(5):C66-C69. DOI:10.12968/hmed.2018.79.5.C66.
12. Huscher D, Thiele K, Gromnica-Ihle E, et al. Dose-related patterns of glucocorticoid-induced side effects. *Ann Rheum Dis*, 2009,68(7):1119-1124. DOI:10.1136/ard.2008.092163.
13. Rzany B, Partscht K, Jung M, et al. Risk factors for lethal outcome in patients with bullous pemphigoid: low serum albumin level, high dosage of glucocorticosteroids, and old age. *Arch Dermatol*, 2002,138(7):903-908. DOI:10.1001/archderm.138.7.903.
14. Lam WY, Fresco P. Medication Adherence Measures: An Overview. *Biomed Res Int*, 2015,2015:217047. DOI:10.1155/2015/217047.
15. Esmaili N, Chams-Davatchi C, Valikhani M, et al. Treatment of pemphigus vulgaris with mycophenolate mofetil as a steroid-sparing agent. *Eur J Dermatol*, 2008,18(2):159-164. DOI:10.1684/ejd.2008.0354.
16. Baskan E B, Yilmaz M, Tunali S, et al. Efficacy and safety of long-term mycophenolate sodium therapy in pemphigus vulgaris. *Journal of the European Academy of Dermatology and Venereology*, 2009,23(12):1432-1434. DOI:10.1111/j.1468-3083.2009.03226.x.
17. Zwerner J, Fiorentino D. Mycophenolate mofetil. *Dermatol Ther*, 2007,20(4):229-238. DOI:10.1111/j.1529-8019.2007.00136.x.
18. Perez F, Van Duin D. Carbapenem-resistant Enterobacteriaceae: a menace to our most vulnerable patients. *Cleve Clin J Med*, 2013,80(4):225-233. DOI:10.3949/ccjm.80a.12182.
19. Liu Y, Tong Z, Shi J, et al. Drug repurposing for next-generation combination therapies against multidrug-resistant bacteria. *Theranostics*, 2021,11(10):4910-4928. DOI:10.7150/thno.56205.

Continued from page 11

Ohio USA. She benefitted from her mothers lived experience with an ileostomy as well as growing up in a home that worked together to create ostomy equipment and make them available to other patients.

Sally has always been a great supporter of WCET®. In order to acknowledge all her contributions, and to thank her for all she has done, Sally was among the first recipients of the WCET® Norma N Gill President's Award. She was so happy and honoured to receive this award, but while WCET® was honoured by her own devotion to providing care to persons with ostomies. Sally was an advocate of the need to have people with knowledge and skills care for persons with an ostomy, which she did for almost 50 years.

Early in 2024, we heard from her about the increasing symptoms she had to face and were concerned about her declining health status. It was WCET®'s turn in our relationship to provide extra support for Sally - to let her know we were there for her and to make sure she knew the high esteem in which our association held her. We had planned to meet with her in person during the June 2024 WOCN® annual conference in Cleveland but she was not able to attend nor were we able to visit her at home due to her ongoing chemotherapy and other treatments. But as always, when there are obstacles, we found a way to move things around. We were able to speak with her on Zoom to again send her our support and love. We sent her a plant to brighten her day.

Afterwards, we corresponded by email and kept in touch to get updates on her health status. We knew she would not be

able to come to Glasgow, nor even do a Zoom call with us. In Glasgow during the Congress, we made a card in which all International Delegates (IDs), Committee members and Executive Board members wrote messages to Sally. We did not know at the time, that it would be our farewell to Sally, as a few days later, we received the sad news of her passing.

In order to honour her and in memory, WCET® has planted three trees, representing our tri-specialty and have contributed to the online guestbook.² We express, once again, to all her family - her two sons, five grandchildren and a great grandchild, her longtime companion, her step siblings and friends our deepest condolences.² Sally will be deeply missed and we will keep carrying her in our heart.

As we wrote in the WCET® commemorative message of the Festschrift book:

There can be no greater tribute to a person than to know that, through their efforts, more than one person's life has been changed for the better.¹

Thank you Sally for all you have done and may you rest in peace, dear ET, WCET® friend and colleague.

REFERENCES

1. Erwin-Toth P & Krasner DL. 2020. Enterostomal Therapy Nursing Growth & Evolution of a Nursing Specialty Worldwide. Perth: Cambridge Media
2. <https://www.donovanfuneralhome.com/obituary/Sally-Thompson#tributewall>