

BLOOD matters

OCTOBER 2018

A NOTE FROM THE EDITOR

Welcome to the latest edition of Blood Matters!

I would like to thank all those who have contributed articles to include in this issue. Our chairperson, Laura Croan, has provided an overview of our Spring Study Day. One of our committee members, Fidelma Hackett has written an interesting article on Publication Ethics. Another committee member, Rosemary Lavery, has shared findings of a recent study she was involved in along with colleagues in Belfast City Hospital on Age Adjusted DDLmer. Ger Walpole recently had an article published in European Journal of Oncology Nursing and a short overview of her publication is also included. In addition, we have

some of our regular features including a list of forthcoming educational events and our word search competition. Can I encourage you to submit your completed entries as you could be in with a chance to win €100?

We would love to have more of our members contributing towards this publication so please do get in touch if you would like to provide an article for the next edition of Blood Matters.

Yours on behalf of the Nurses and AHP Committee

Ruth Thompson

Newsletter Editor

IN THIS ISSUE

- 3 2017 ANNUAL MEETING PRIZE WINNERS
- 4 OVERVIEW OF THE NURSES AND AHP SPRING STUDY DAY, APRIL 2018
- 6 ETHICAL CONSIDERATIONS WHEN SUBMITTING FOR PUBLICATION
- 8 AGE ADJUSTED D-DIMER IN BHSCT: A RETROSPECTIVE STUDY
- 11 FORTHCOMING EVENTS 2018-2019
- 12 MYELOMA PATIENTS' EXPERIENCES OF HAEMATOPOIETIC STEM CELL TRANSPLANT
- 14 CROSS BORDER HEALTH & WELLBEING CAMPUS
- 15 WORDSEARCH WINNER
- 16 WORDSEARCH COMPETITION

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BURSARY INFORMATION

Details of bursaries aimed at supporting innovations in haematology practice and educational development can be found on our website:

www.haematologynursesireland.org

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2017 ANNUAL MEETING PRIZE WINNERS

Congratulations to the prize winners from our Annual Meeting in Belfast, 2017

Best Nursing/AHP Oral Presentation (Gillian Lamrock Prize) – Geraldine Walpole

Best Nursing/AHP Display Poster Presentation – Bernie McShane

Nursing/AHP Oral Presentation 2nd Prize- Fidelma Hackett

Nursing/AHP Poster Presentation 2nd Prize – Michele Mannion

Best Newsletter Article – Laura Croan



Laura Croan with Ger Walpole



Laura Croan with Fionnuala Diamond and Bernie McShane

OVERVIEW OF THE NURSES AND AHP SPRING STUDY DAY, APRIL 2018

- by Laura Croan, Chair of HAI Nurses and AHP Group

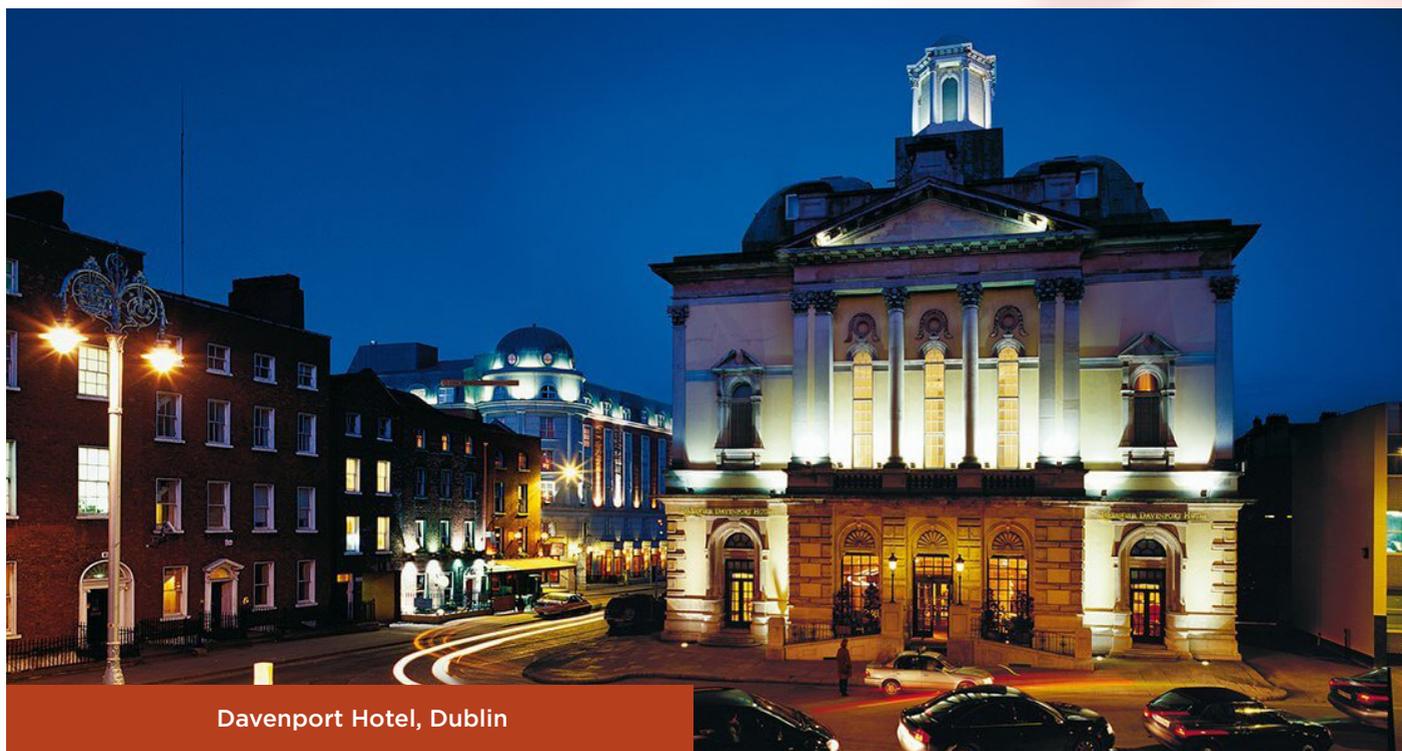
The Haematology Association of Ireland Nurses and Allied Health Professional Spring Study Day took place on Friday the 13th of April in the Davenport Hotel Dublin. The meeting had a great attendance with fantastic speakers who covered some very pertinent topics.

We commenced on Friday morning with a fascinating talk from Dr Scott McCloskey, Haematology Consultant, Antrim Area Hospital. He gave a fantastic presentation on the future of haematology treatments including immunotherapies and an explanation of the complexities of CAR-T cell therapy.

Emma Dowling, Macmillan Haematology Nurse Specialist from Harley Street at University College Hospital, London then gave us an overview of novel therapies in Myeloma in the relatable form of case studies.

Following a short coffee break and time to meet our wonderful sponsors there was a quick change to the programme, (well we had to keep up with Friday the 13th tradition!) and Ger Walpole kindly stepped in and updated us about Daratumumab use in Myeloma.

Michael Jackson (no not that one) Specialist Pharmacist, Belfast Health and Social Care Trust gave us a very thought provoking presentation on the aspects of medicine concordance which is very valuable in the era of new emerging oral novel therapies.



Davenport Hotel, Dublin



Following a delicious lunch, dessert, networking and coffee we moved on to our case studies and discussion session continuing with the theme of medicine concordance in haematological patients. We had case studies by Fidelma Hackett on an elderly CLL patient requiring treatment with cognitive impairment, Grainne O'Toole with a paediatric case study and Snehal Prabhukeluskar on a CLL patient on oral therapy with a mental health diagnosis impacting on adherence. This created a lot of discussion regarding the difficulties of getting patients to adhere to medications especially in the changing landscape of continuous oral therapy for haematological disorders.

To end we had a very emotive video, recorded by Macmillan Cancer Support, by Kirsty McMurray. Kirsty is one of our own haematology nurses who while working in the Belfast haematology unit was unfortunately diagnosed with Lymphoma. She has had a very difficult journey, including an autologous stem cell transplant and amazingly had the courage to share her journey with us all from the perspective of staff member - to patient - and back. Thank you for your inspiration Kirsty!

The 2018 HAI Nurses and AHP Spring Study Day had great feedback despite our last minute changes and attendees found the

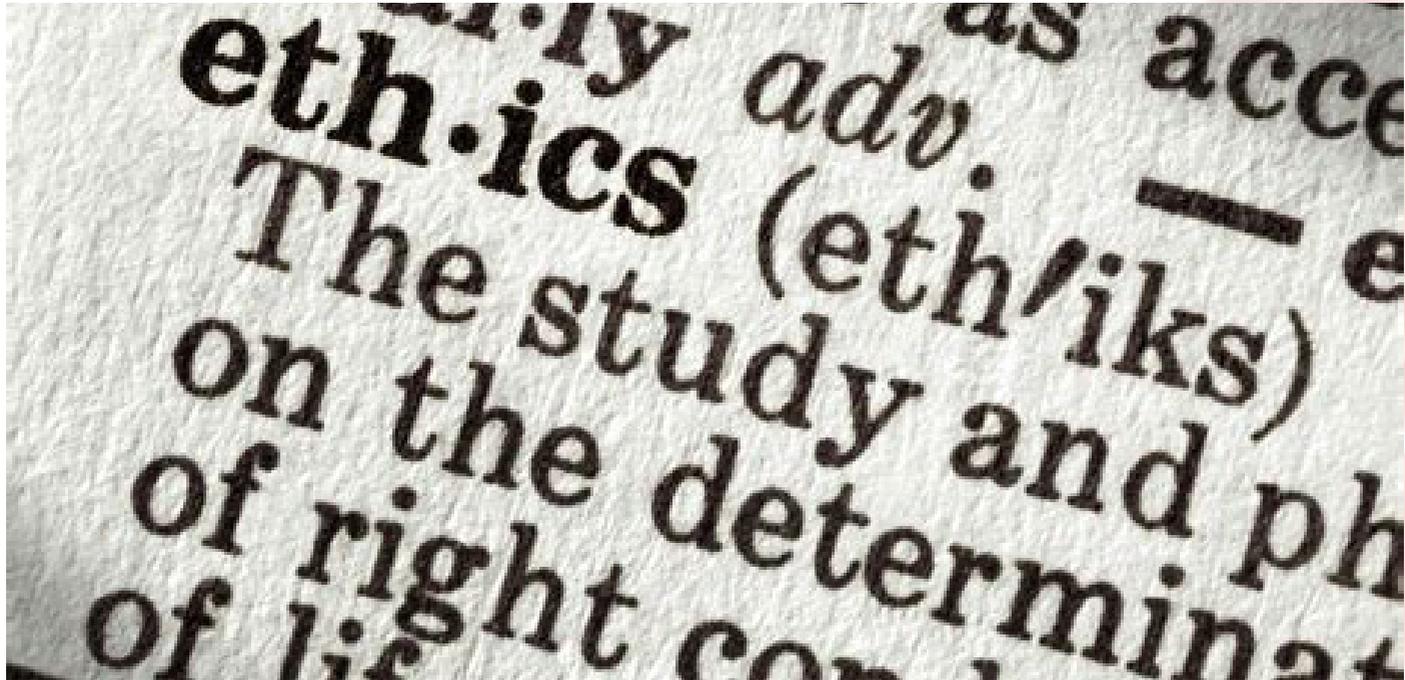
topics very beneficial. Thank you to all committee members and our administrator Sinead for their unrelenting hard work in getting speakers and putting together these programs. And thank you to all our sponsors who make this feasible. We are looking forward to our Annual General Meeting in October and hope you find it valuable also.

Finally I want to end by congratulating all our AGM 2017 prize winners and encouraging you to submit an abstract for our next conference. You could be the next winner!



ETHICAL CONSIDERATIONS WHEN SUBMITTING FOR PUBLICATION

By Fidelma Hackett, Haematology CNS, University Hospital, Limerick



Publication in peer-reviewed journals is crucial for the continued advancement of nursing as an academic profession and contributes to the nursing knowledge base.

There is an established tradition of research and publishing within nursing academia but in recent years there is also an emergent expectation of clinical practitioners engaged in extended roles or within specialist areas to undertake research projects and literature reviews and to disseminate their findings through publication (Albarran & Sholes, 2005). Nursing students who complete a Masters thesis are also encouraged to consider publication of their research findings with an emphasis on “publish or perish” or disseminating their research findings while still pertinent (Resta et al, 2010).

One area of concern which has been identified within scholarly publication is a lack of knowledge and understanding of the ethical considerations to be addressed prior to the submission of a manuscript for publication

(Fierz et al, 2014). Breaches of publication ethics have been reported resulting in retraction of articles (Poster, 2012, Smith et al, 2014). Specific ethical issues which apply to the publication process include determination of authorship, disclosures of conflict of interest, copyright, plagiarism, double publication, permission and fabrication, and falsification or inappropriate data manipulation (Carlson & Ross, 2010, Resta et al, 2010, Smith et al, 2014).

Information and advice in relation to the complex elements of publication is available from many sources. Best practice guidelines from the International Committee of Medical Journal Editors (2013) and international standards set out by the Committee of Publication Ethics (Wagner & Kleinert, 2011) are key sources of information on publication

ethical issues. These international standards provide clear definitions of key concepts in publication ethics and guidance for authors in relation to complex ethical publication dilemmas. Professional nursing organisations have also developed criteria for establishing authorship which include clear guidelines regarding the concept, definition, principles and ethics related to determining authorship (Carlson & Ross, 2010).

Many journals now incorporate the principles of publication ethics into individual journal policies for authors, some of which entail signing an author guarantee statement to indicate conformity with the policy (Roberts, 2009). The professional literature also provides guidance to nurse-authors with many articles outlining the steps involved in the preparation and submission of a manuscript for publication including discussions on the ethics of publication (Albarran & Scholes,

2005, Plaisance, 2003). The addition of publication ethics as a subject within undergraduate and post graduate nursing educational programmes has also been recommended in order to improve knowledge and raise awareness of publication ethics within the nursing profession. (Smith et al, 2014).

Publication ethics is important to nurses, authors and the profession. Nurses rely on published research-based evidence and innovations in practice to inform clinical practice and provide evidenced-based care (Poster, 2012). A breach of publication ethics has the potential to adversely affect both patient care and the integrity of the profession. Adhering to best practice in publication ethics safeguards the integrity of the published piece and has implications for authors, nurses and patients.

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AGE ADJUSTED D-DIMER IN THE BELFAST HEALTH AND SOCIAL CARE TRUST: A RETROSPECTIVE STUDY

B. Merron, R. Lavery, H. Speers, M. Worthington, G. Benson

Ulster Med J 2018;87(1):27-29

One of our Committee Members, Rosemary Lavery was involved in a recent study in Belfast City Hospital. Below is a copy of the findings which were published in the Ulster Medical Journal (with permission.)

ABSTRACT

D-dimers combined with clinical pre-test probability (PTP) scores are used to determine the likelihood of a venous thromboembolic event (VTE). It is recognised that with advancing age, d-dimer values increase, leading to a cohort of patients with a d-dimer above the standard cut-off of 500µg/L. A recent systemic review, examined the accuracy of an age-adjusted D-dimer in those aged > 50 years with a low clinical risk of a VTE. This showed an increase in specificity without loss of sensitivity. Our study, aimed to examine a population of patients, who between 2011 and 2014 underwent ultrasound Doppler studies of lower limbs. By applying a corresponding age-adjusted D-dimer, we determined the sensitivity and specificity and compared this to use of conventional D-dimer.

INTRODUCTION

D-dimers are fibrin degradation products which result from plasmin activated fibrinolysis. Their presence suggests activation of the coagulation system.¹ D-dimers are used in conjunction with clinical pre-test probability (PTP) scores to determine the likelihood of a venous thromboembolic event (VTE).² A commonly used pre-test probability scoring system is the Wells' Score.³ The Wells' score is used in ambulatory patients and calculates the likelihood of VTE, such as deep venous thrombosis or pulmonary embolism. This practice is supported by NICE guidelines on diagnosing VTE.⁴ If the PTP score is low, a corresponding negative D-dimer rules out the need for imaging, as the likelihood of a VTE is low. If however, the D-dimer is elevated, then ultrasound Doppler imaging is required.⁴ It is recognised that D-dimers increase with advancing age, leading to a high proportion of patients with d-dimers above the standard cut off value of 500µg/L with no underlying VTE.^{5, 6} A recent systematic review assessed the accuracy of age adjusted D-dimer in those >50 years of age with a low PTP for a VTE event. It suggested there was an increased specificity without loss of sensitivity of age-adjusted D-dimer versus conventional D-dimer.⁷ This would

infer benefit in using age adjusted d-dimer in determining which patients require ultrasound Doppler. An age-adjusted D-dimer is calculated based on age (years) x10µg/L.

Lapner et al published evidence refuting the role of ageadjusted D-dimer, suggesting that the increased specificity is a result of a non-specific increase in the average D-dimer threshold used to exclude VTE.⁸ In our study, we aimed to assess the potential role of age adjusted d-dimer, its reliability and the potential impact it could have on both the patient journey and radiology services within the Belfast trust. If evidence supported age-adjusted D-dimer, it could potentially reduce the number of ultrasound Doppler requests, resulting in time and resource savings.

METHODS AND MATERIALS

The radiology department of the Royal Victoria Hospital provided data on all ultrasound Doppler of lower limbs performed in the department between 2011 and 2014. This included both inpatients and those attending A&E (either self-presentation or referral from primary care). A search was then conducted through hospital laboratory records for the corresponding d-dimer result. This left us with a cohort of 350 patients, aged >50 years, with a recorded d-dimer who underwent Doppler ultrasound imaging of lower limbs. Using this data, we calculated the sensitivity and specificity using age-adjusted d-dimer versus conventional D-dimer in four different age categories; 51-60 years, 61-70 years, 71-80 years and > 80 years of age. A cohort of patients aged less than 50 years were also included as a comparator group. PTP was not consistently recorded in inpatient records or on radiology requests to allow for any reliable, accurate statistical information to be calculated from this.

RESULTS

Demographics of the group are detailed in Table.1 Specificity of conventional D-dimer is known to be between 49-67% in those less than 50 years

and anything between 0-18% in those over 80 years.⁷ The specificity of age-adjusted d-dimer in our cohort was higher than that of conventional d-dimer in all age groups recorded. The sensitivity

TABLE1.
Patient Demographics

Patient Demographics			
Age Group (years)	Total	Male	Female
51-60	69	37	32
61-70	85	42	43
71-80	107	69	38
>80	89	60	29

was maintained above 75% in all categories with use of age-adjusted d-dimer. These figures are shown in Table.2.

TABLE2.
Specificity and Sensitivity of age-adjusted and conventional D-dimer

Age Group (years)	Specificity (%)		Sensitivity (%)	
	Age-adjusted	Conventional	Age-adjusted	Conventional
<50	N/A	41	N/A	68.8
51-60	39	23	92	92
61-70	33.8	23	80	80
71-80	32	16.5	78.6	100
>80	36.4	8.1	80	100

N/A – Not applicable

Hypothetically, if those with a low PTP had a corresponding negative age-adjusted D-dimer, application of age-adjusted d-dimer cut-off value could have prevented 59 (16.6%) inappropriate Dopplers in our cohort.

With use of age-adjusted D-dimer across the whole cohort, there were 14 false negatives. Of these, four Dopplers revealed non-occlusive clot in keeping with an old VTE and not an acute episode, reducing this to 10 false negatives. Of these ten episodes, only five had a corresponding PTP recorded. Three patients had low risk scores while the remaining two had scores suggesting high likelihood of DVT. It is difficult to draw conclusions from this data due to its limited nature.

DISCUSSION

Our findings are in keeping with those of Schouten et al; the use of an age-adjusted d-dimer cut off value of age (years) x 10µg/L, increases the specificity of the test, when used in conjunction with a low risk PTP score. Patient care could be improved with a reduction in the number of unnecessary tests and time spent at hospital. Unnecessary low molecular weight heparin administration whilst awaiting diagnostic imaging would not be required, again improving the patient experience. Sensitivity was maintained in the 51-60 and 61-70 age groups, but there was a reduction in

sensitivity in the older age groups when compared to conventional d-dimer group. Our small numbers may have contributed to this. Those with a high PTP, a Well's Score of two or more, do not require a D-dimer if imaging is performed within four hours.⁴ It could be inferred that those high risk of a VTE as per their PTP score would not have had a D-dimer performed and therefore would not be in our cohort of patients.

The false negative results are notable, the consequences of not diagnosing a new VTE having the potential to be fatal. To examine the false negative cohort within this study requires access to the PTP which unfortunately is not available for informative conclusions to be made. In line with recommendations regarding interpretation of PTP, it should only be those patients considered low risk for VTE that should have had a D-dimer performed.

One of the study's strengths is the standardised calculation of the D-dimer, using the Innovance latex assay, as part of the standard operating procedure in our laboratory. The main limitations of this study are its small numbers and that this was a retrospective study. The lack of data on the pre-test probability scores reduces the reliability of the results.

CONCLUSION

Age-adjusted D-dimer is more specific for those with a low risk pre-test probability for VTE, when aged > 50 years. Sensitivity in our cohort was reduced which may be the result of small numbers and the retrospective nature of the data. Although the results are similar to those of Schouten et al, they do not support the role of age-adjusted D-dimer, as increased specificity with age-adjusted D-dimer is secondary to increased over-all average D-dimer threshold, as proven by Lapner et al.⁸ Further studies are necessary to optimise the diagnostic role of the D-dimer in VTE.

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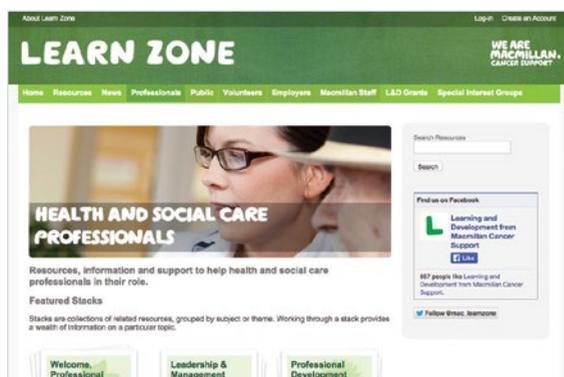
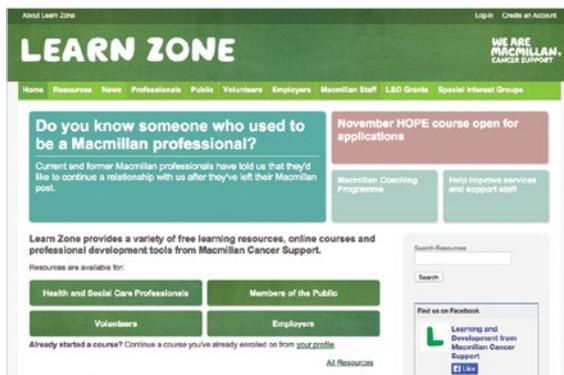
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FORTHCOMING EVENTS 2018-2019

**60th American Society of Haematology Annual Meeting
and Exposition
1st - 4th December 2018
San Diego, CA**

**Haematology Nurses and Healthcare Professionals Group (HNNCP)
Educational Conference
1st - 2nd February 2019
Zurich, Switzerland**

**45th Annual Meeting of the European Society for Blood and Marrow
Transplantation
24th - 27th March 2019
Frankfurt, Germany**

**59th Annual Scientific Meeting of the British Society of Haematology
1st - 3rd April 2019
Glasgow, UK**

**24th Congress of the European Haematology Association
13th - 16th June 2019
Amsterdam, The Netherlands**

MYELOMA PATIENTS' EXPERIENCES OF HAEMATOPOIETIC STEM CELL TRANSPLANT

Congratulations to Ger Walpole (RANP Haematology, Sligo University Hospital) who has recently had an article published in European Journal of Oncology Nursing. The article is co-authored by Maura Dowling who acts as External Adjudicator each year at our Annual Conference.

Below is a short overview of the article:

Background: Multiple myeloma is a malignancy of plasma cells that originate from the B-cell lineage. It is characterised by the overproduction of a monoclonal protein that then results in end organ damage and numerous symptoms including anaemia, renal insufficiency, hypercalcaemia and bone destruction. Although consistent improvements in survival have been made over the last ten years, myeloma remains an incurable condition. Haematopoietic stem cell transplant and the introduction of novel agents, has resulted in significant improvements in life expectancy and extended the median survival in all age groups by 50% with more significant improvement in patients under 60 years of age.

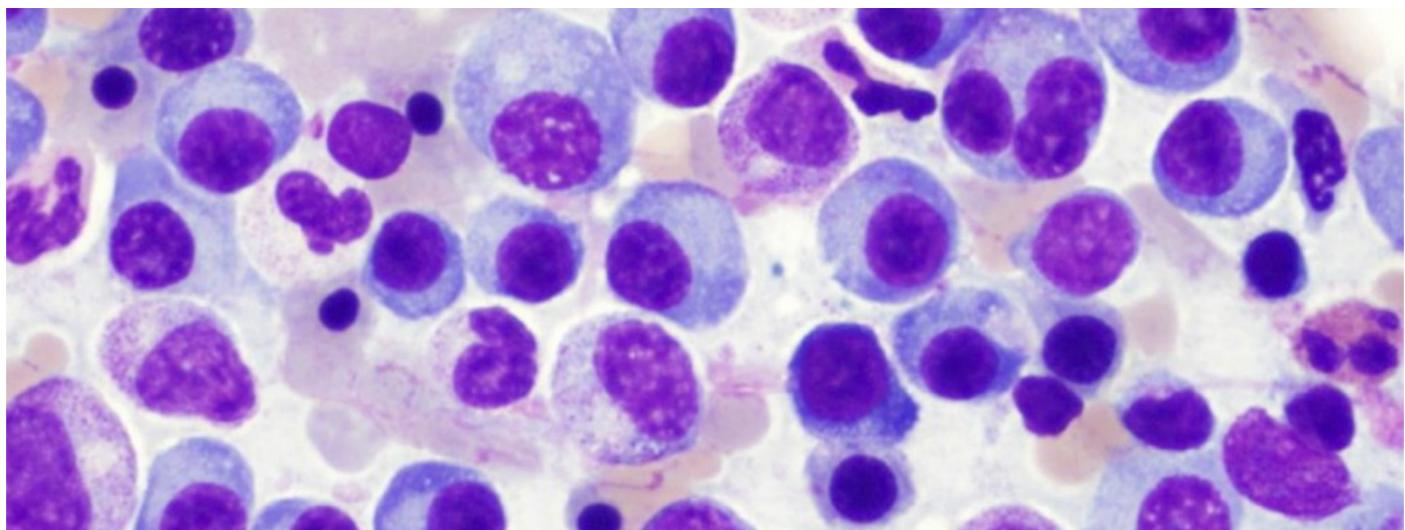
For around 20 years, high dose melphalan treatment followed by autologous haematopoietic stem cell transplant (autoHSCT) has become the standard treatment for patients under 65 with myeloma. This treatment however remains

controversial with varying opinions on its role in the management of multiple myeloma. Many toxicities can be experienced following HSCT and patients require intensive supportive and psychological care.

Although the risk of mortality with autologous transplant is low, the short and long term emotional, psychological and physical consequences can negatively impact on quality of life and functioning.

Nurses play a pivotal role in educating and supporting patients in order to initiate early intervention to reduce side effects and associated distress. It is essential that nurses caring for myeloma patients undergoing transplant have an insight into their experiences.

The purpose of the study was to synthesise all qualitative evidence on the experiences of myeloma patients undergoing HSCT.





Method: A systematic search of the literature was undertaken using six online databases. Software was used to blind screen for eligible papers. Quality appraisal of each study was undertaken and a research approach was used to assess confidence in each finding.

Results: Eight qualitative studies were selected in the final sample for evidence synthesis. Four themes were identified:
 Patients' feeling 'dead': Transplantation can be a distressing and difficult time. While patients reported feeling fearful of dying they also reported that at times they felt they had actually 'died'. The sense of an imminent death was also evident and patients also described feeling 'empty' and fearful of a relapse.

Disconnecting and isolating themselves:
 Patients reported that they attempted to disconnect or isolate their thoughts to protect their psychological well-being. They tried not to think negative thoughts such as fear, sadness and anger. Some also chose to withhold information from their family regarding how they really felt.

Cognitive impairment: Cognitive changes were common including problems with short-term memory and poor concentration. Patients who had undergone multiple previous treatments were more affected and fatigue worsened symptoms.

Engagement with exercise and its benefits in recovery: Some patients believed that exercise contributed to their recovery. Walking was the exercise most popular among myeloma patients but others enjoyed activities including yoga, pilates, aerobics, strength training, gardening and tai chi. Patients also wanted an exercise programme to be individualised them following a physical assessment. Barriers to exercise included

fatigue, nausea, dyspnoea and pain.

Discussion & Conclusion: This is the first known systematic overview of qualitative studies exploring the experiences of myeloma patients who have undergone autoHSCT..

The authors provide wide discussion on how these findings could be used and built upon including:

- Using the findings to discuss with patients during information sessions prior to transplant.
- The feeling of death associated with stem cell transplant could be further evaluated
- The prevalence and burden of cognitive functioning among myeloma patients post-transplant was under appreciated and often under detected.
- Nurses should ask patients regularly about their memory and any challenges they may be experiencing to their concentration and recall as it is well known that cognitive impairment can have an impact on daily activities.
- Physical exercise was highlighted as being of great benefit to myeloma patients to help overcome the impact of treatment and symptoms.

The full article and references are available online.

Walpole, G., Clark, H. and Dowling, M. (2018) Myeloma patients' experiences of haematopoietic stem cell transplant: qualitative thematic synthesis. European Journal of Oncology Nursing, 35, pp15-21

CROSS BORDER HEALTH & WELLBEING CAMPUS

A new Health and Wellbeing Campus, the first of its kind in Northern Ireland, opened recently at Altnagelvin Hospital.

Developed in partnership by the Western Trust and Macmillan Cancer Support, the Campus incorporates a state-of-the-art Macmillan Support Centre and the recently refurbished Agnes Jones House. This exciting joint venture aims to improve cancer services for people across the North West, with Agnes Jones House hosting services for patients with other long term conditions.

The Health and Wellbeing Campus is unique as it will provide support to people affected by cancer from both Northern Ireland and the Republic of Ireland who are attending the Northwest Cancer Centre for treatment.

People affected by cancer can access information, support and signposting to charities within their local area.



Services in the Campus include:

- Macmillan Welfare Benefits Service
- Macmillan Information and Support Service
- Clinical Psychology
- Wig Consultation and Fitting
- Breast Prosthesis
- Bra Fitting
- Counselling Services
- Art Therapy
- Creative Writing
- Self Management Programmes
- Look Good Feel Better
- Complementary Therapies

CHRONIC MYELOID LEUKAEMIA €100 WORDSEARCH COMPETITION

WINNER

Congratulations to **Lourdes McAlester**, (Haematology CNS, Mater Private Hospital, Dublin) who was the first correct entry drawn in our competition. She is the winner of €100.

S C Y T O Q R M U T A T I O N P H P I A
E I I B B S I G R E G B C O I L O B Y S
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GRANULOCYTES
IMATINIB
MONITORING
MUTATION
MYELOID
NEUTROPENIA
NILOTINIB
PHILADELPHIA
PONATINIB
PROLIFERATION
SPLENOMEGALY
TRANSPLANT
TYROSINE KINASE

WOULD YOU LIKE TO WIN €100?

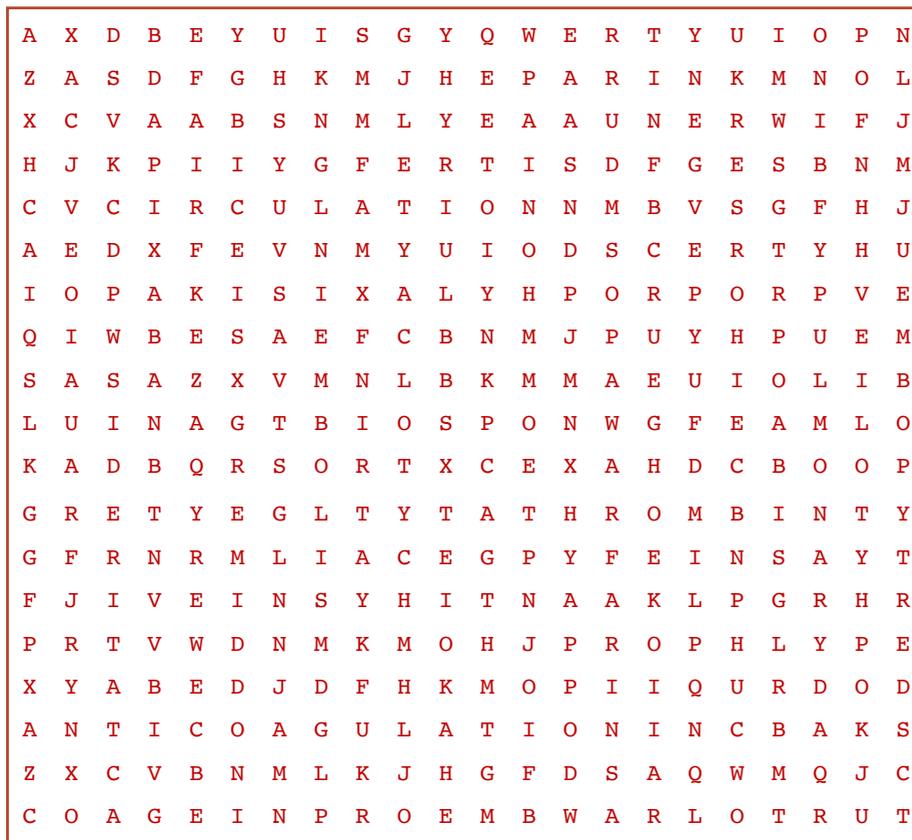
Blood Matters have another wordsearch competition where you can win €100. Interested? The competition is on the next page - GOOD LUCK!

€100.00 WORDSEARCH COMPETITION

Find all the words listed below within the grid which are all related to:

**VENOUS
THROMBOEMBOLISM
(VTE)**

Closing date for entries will be Friday 7th December 2018.



All completed entries should be sent to:

Ruth Thompson,

Macmillan Cancer Support,
5a Stirling House,
Castlereagh Business Park,
Castlereagh Road,
Belfast, BT5 6BQ

**GOOD
LUCK**

WORDS INCLUDED IN THE WORDSEARCH

ANTICOAGULATION	HEPARIN
APIXABAN	PAIN
CIRCULATION	PROPHYLAXIS
CLOT	PULMONARY
COMPRESSION	RISK
DDIMER	THROMBIN
EMBOLISM	VEINS
ENOXAPARIN	WARFARIN

Name:

Job Title:

Work Address:

Telephone: