

Poster Presentation:
Cardiovascular Vital Signs at Solid Tumor
Diagnosis: Hypertension and Tachycardia
Prognostic for All-Cause Mortality

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Cardiovascular Vital Signs at Solid Tumor Diagnosis: Hypertension and Tachycardia Prognostic for All-Cause Mortality

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Background

Cancer and heart disease are the most common causes of adult deaths in US

The interplay between cancer, heart disease, and other comorbidities may share biological mechanisms

Greater understanding of the interplay may improve cardiovascular disease and cancer outcomes

Blood pressure (BP) assessment is essential before, during, and after cancer treatment

Prognostication is essential for oncology decision-making but remains a clinical challenge

Objective

To examine whether cardiovascular vital signs (VS) were prognostic for overall survival (OS) in a large, real-world cohort of unselected newly diagnosed cancer outpatients

Methods

Design: Exploratory retrospective study of EMR

Sample: adult outpatients with a solid tumor diagnosis who had at least 2 encounters ≥7 days

Systolic Blood Pressure (SBP; mmHg) categories: <120; 120-129; 130-139; 140-149; ≥150

Resting Heart Rate (RHR; beats/min) categories: <60; 60-69; 70-79; 80-89; 90-100; 101-109; ≥110

For Kaplan-Meier analysis of RHR, we used lower (<80), normal (119-80), and higher (≥120) SBP and bradycardia (<60), normal (60-100), and tachycardia (>100)

Cox Proportional Hazards Models examined potential prognostic factors (age, body mass index, extent of disease, gender, primary tumor site, race, and treatment modality) for OS

Kaplan-Meier method estimated survival at T1 & T2

Results

Table 1. Demographic Data (N=5819)

Characteristic	T1	T2	P-Value
Age (mean, years)	61 ± 12	62 ± 12	< .0001
Male	59%		
Caucasian	77%		
Primary Cancer Site			
Prostate	19%		
Lung	15%		
Breast	14%		
Metastatic Disease	18%		
Chemotherapy		40%	
Radiotherapy		39%	
Other therapies		39%	

Table 2. Clinical Characteristics (N=5819)

Characteristic	T1	T2
SBP <120	22%	27%
120-149	56%	54%
≥150	22%	19%
RHR <60	6%	7%
60-109	90%	86%
≥110	4%	7%

Representative of US cancer Diagnoses (Gender & Race)

T1 - T2 Duration = 6 (0-36) mos

Post-diagnosis OS: 27 (25 - 28) mos

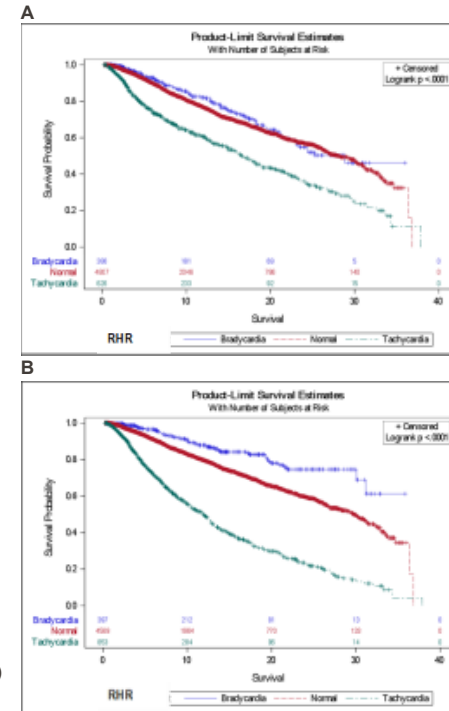
Tachycardia = ↑Mortality Risk (HR T1: 1.7-2.9, T2: 2.7-4.2)

Hypertension = ↓Mortality Risk (HR T1: 0.79-0.81, T2: 0.65-0.80)

SBP & RHR Independently Prognostic both T1 & T2

Results

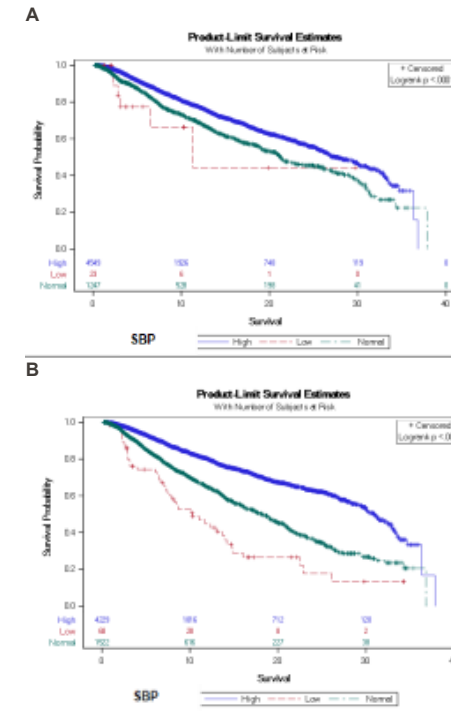
Figure 1. Kaplan-Meier Plot of Overall Survival (Months) by RHR Category at (A) Diagnosis (T1) and (B) Final Visit (T2)



RHR: Bradycardia <60, Normal 60-100, Tachycardia >100

Results

Figure 2. Kaplan-Meier Plot of Overall Survival (Months) by SBP Category at (A) Diagnosis (T1) and (B) Final Visit (T2)



SBP: Low <80, Normal 80-119, High ≥120

Conclusions

At diagnosis, tachycardia and elevated BP had clinically and statistically important relationships with survival in newly diagnosed outpatients with pretreatment solid tumors

Tachycardia predicted shorter survival, whereas elevated BP was associated with a better prognosis

The risk of death was 18-35% lower with elevated SBP than normal BP

Tachycardia had a 2-3 fold increase in mortality at both timepoints

These estimates were robust and independent from other covariates

The magnitude of associations between these VS and OS also increased progressively, with survival more pronounced with progressively higher RHR and lower BP cohorts

These associations also remained evident over time

Cardiovascular VS can help formulate survival predictions

Future Research

Further research is warranted to confirm these observations and consider whether hypotension and high RHR should represent therapeutic targets in the management of solid tumors

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Poster Presentation: Coming Home to Die, Reality vs Expectations Mismatch

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Coming Home to Die, Reality vs Expectations Mismatch

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Abstract

Goals of care discussions play an important role in the advance care planning of a patient with a serious illness. Preferred Place of Care and Death (PPC/PPD) are usually discussed as part of ongoing conversations during a patient's journey with a life-limiting illness. As clinicians, whilst working at a Palliative Care Unit in Trinidad and Tobago, we have observed the concept of "coming home to die" takes on a different connotation. Patients refer to home as not a physical space but the island of Trinidad and Tobago. This case series attempts to share a few vignettes of patients who have left the United Kingdom, United States of America and Canada to spend the end of their lives in Trinidad and Tobago.

Case 1

JL was a 59 year old female who returned to Trinidad from Canada in 2017. She had a history of Stage IV colon cancer and was managed in Canada on multiple lines of chemotherapy. She indicated that she had input in her care from both the Oncology and Palliative Care teams in Canada. When we first met Mrs JL on the acute medical ward in a general hospital in Trinidad, she revealed that she returned to Trinidad three months prior. She was followed up by the Oncology team in Trinidad and was started on oral chemotherapy. Whilst inpatient, she had a full body CT scan which showed extensive metastatic disease with metastasis to the brain, lung and bone. She was referred to our team for assistance with control of her breathlessness. She was previously on Morphine tablets and was started on Dexamethasone as an inpatient with minimal relief of her breathlessness. She was fully oxygen dependent. After review, our team offered admission to the Palliative Care Unit for symptom control and arranged a family meeting to discuss goals of care and introduce our service to the family.

Her husband attended the family meeting as Mrs JL's children were still in Canada. At the meeting, our team discussed many issues including:

- i) The current medical state of his wife as a recent CT scan findings which were suggestive of disease progression
- ii) Estimated prognosis of days to short weeks based on her poor condition



- iii) Mrs JL's wishes to be cared for at home and the disposition for home care, i.e. the need for oxygen source (concentrator/tanks), a home doctor, and home nurses. JL's husband wanted her to be cared for in an institution but would respect his wife's wishes to spend some time at home.
- iv) Future planning: Our team advised that he should inform his children in Canada immediately of his wife's condition and they should come visit immediately. We also gave the option of hospice admission if this was required.

A few days later upon discharge from the hospital, Mrs JL's husband and son arrived at the unit, stating that her symptoms were difficult to control at home and she required admission. She was subsequently admitted for end of life care on the same day. Her symptoms eventually needed to be managed by an infusion pump of Morphine and Midazolam as Mrs JL exhibited terminal restlessness. She spent her last days on the unit surrounded by her children and family who returned to Trinidad to spend this time with her.

Case 2

WS was a 74 year old male who returned to Trinidad in July 2018 after a recent diagnosis of Stage IV pancreatic cancer. Mr WS was living and working in Maryland, USA, when he started to have constitutional symptoms. He was investigated and found to have Stage IV cancer. He opted out of oncological treatment. After discussions with his daughter, he returned to Trinidad to spend his final months. He lived with his daughter and her family in Trinidad and was managing well with his family. Prior to him returning home, his daughter, a registered nurse, contacted our palliative care unit to find out about the services which were offered. Our team was subsequently contacted for an outpatient clinic appointment since Mr WS was declining at home and having a greater symptom burden of vomiting and getting overall weaker. Although his ex-wife was assisting in his care, this was becoming a challenge. Mr WS spent 10 days at the Palliative Care Unit and eventually passed away.

While on the unit, Mr WS expressed that he missed living in the USA and one of the main reasons he returned to Trinidad was to pass on his construction and other skills to his grandson. He felt that he was able to impart some skills, but was hoping to pass on more when his grandson visited him at the Unit.

Case 3

BW, a 68 year old female was referred to our team by palliative care colleagues in the UK on 17th September 2018. She was known to have Stage IV cervical CA with peritoneal metastases, ascites, pleural effusions, bony lesions and intramuscular deposits. She had bilateral nephrostomies, and ureteric stents, but essentially normal renal function. Her symptoms at this time included increased fatigue, lower limb oedema, gastrointestinal reflux and generalised abdominal discomfort. Mrs BW's most recent CT showed disease progression and she opted to return home to the Southern part of Trinidad for end of life care. At this time Mrs BW was given a prognosis of short weeks. She was sent with prn liquid morphine, metoclopramide and laxatives. The palliative care team was able to make contact via email with the BW's daughter, and main caregiver, who also returned with her to Trinidad. We encouraged her to phone us as soon as possible, to discuss the services available and how we could assist with Mrs BW's care.

Our team was contacted by Mrs BW's daughter two days after she arrived in Trinidad on 19th September, reporting increased abdominal distension, decreased oral intake, lethargy, increasing pain and overall decline. We offered to see her immediately and also admission to the Caura Palliative Care Unit. Unfortunately, the patient did not want to be admitted to an institution and wanted to stay at home. We attempted to contact our colleagues in South Trinidad, who could make a private home visit and offer support for end of life care, but no one was available at that point.

After many calls, the palliative care team at Caura was able to connect BW's family with Dr. X on 20th September, who saw them for a goals of care meeting at her public palliative care clinic in a hospital in South Trinidad. She was able to give advice on managing Mrs. BW at home. Eventually Dr. Y, a private general practitioner with palliative care experience, was able to review Mrs. BW at home on 22nd September. At this time Mrs. BW was dyspneic, anuric, and had skin mottling. She passed away the next day, about one week after returning to Trinidad from the UK.

Learning Points

Case 1: Earlier referral to our palliative care service in this case could have prevented a hospital admission. In addition, a more structured attempt to give the patient her wish of preferred place of death as home could have been achieved. Advanced care planning was only undertaken days before her admission to our service which was not ideal. However, JL's family was very pleased to have the support of the palliative care team during the dying phase of her illness as they were able to optimize this valuable time with her.

Case 2: Mr WS's daughter was a nurse, so was able to figure out that she may have needed assistance of a palliative care team in the course of her father's illness. Ideally, referral or initial discussion with a palliative care team abroad would have helped immensely. Mr WS's hopes and expectations for his illness could have been addressed earlier. His PPC/PPD may have been explored in more detail prior to returning to Trinidad and Tobago. Mr WS would have preferred to be at his daughter's home, highlighting the need for home palliative care services to assist with the provision of care.

Case 3: Currently there is no formalized home hospice service in Trinidad, or full care package that can be conveniently accessed. A few private doctors will assist with end of life care at home, but it depends on their availability and location of the patient. Additionally, visiting nurses and equipment have to be organized by families. Patients who desire their preferred place of care/death to be the family home, need to have many aspects of home care thought out. Ideally, these care needs should be organized in advance to actually requiring them, and depend on the patient's location and financial means. Inpatient hospices are located in western and eastern parts of Trinidad, and there are no inpatient units in South Trinidad. This makes access to inpatient services challenging.

Discussion

It is important to explore patients' preferences on place of care and death. This is vital in attempting to honour these wishes as best as we could as health care practitioners. We recognize that these wishes may change over the course of a patient's illness.

Reflecting upon these cases, our team identified the importance in highlighting the existent palliative care services in Trinidad and Tobago to our international colleagues. Our service can be useful to those patients returning home to die or even for a vacation. There is Caribbean diaspora throughout the world. A few may want to return to their birth country to spend the end of their lives. We believe that informing our International Health Care Practitioners on the services available in Trinidad and Tobago can assist in formulating smooth transitions of palliative care patients from one country to another. This is even more important in the post-COVID era.

There are online sites that provide contact information on the palliative care services located in Trinidad and Tobago and also the Caribbean. These include the International Association for Hospice and Palliative Care¹ and The Caribbean Palliative Care Association². We look forward to global collaboration in Palliative Care through the continuity of care that we provide to our patients.

Contact the Authors

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If you have a patient who is trying to repatriate to the Caribbean
Visit www.caripalca.org to research the resources of the relevant territory

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Poster Presentation:
End-of-Life During the COVID19 Pandemic –
Highlighting the role of a dedicated
Palliative care Social worker during this
time of crisis.

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End of Life During the COVID19 Pandemic – Highlighting the role of a dedicated Palliative care Social worker during this time of crisis.

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Abstract

Our world has become more complex and difficult with the emergence of the COVID19 pandemic. We are forced to face challenging situations we have never experienced before. As the death toll grew exponentially, our health care system was pushed to its limits. With the numbers rising, also came the increasing need to support patients, families and healthcare professionals due to the overwhelming emotional distress brought on by the pandemic.

Crucial amid a pandemic are health care providers that can assist patients and families during this time of crisis. Social workers are vital to holistically address the psychological, social, emotional and financial challenges through action, intervention and use of resources.

Palliative care (PC) providers are also essential during pandemics since they provide specialized care to individuals with serious illness. They help address physical, emotional, and spiritual suffering that patients go through by symptom relief, pain management, and support from psychosocial and spiritual distress (Fernando & Hughes, 2019).

A Palliative care team (PCT) consists of multiple team members that include physicians, nurses, social workers, psychologists and chaplains. Currently, there are limited literature that outlines and documents what social workers, specifically palliative care social workers (PCSW) can assist with during pandemics (Social Work Today, 2020). However, in this case report, we will be able to describe and highlight the significant role of our PCSW in a patient affected by the pandemic.

Case Study

This is a case of a 61-year-old male with a complicated medical history, including but not limited to, repeated strokes and multiple organ transplants. The patient was admitted to the hospital due to sepsis secondary to pneumonia related to COVID19. Our (PCT) was consulted to assist with clarification of goals of care and psychosocial support. Due to patient's persistent confusion and decline, his wife made decisions on his behalf. His wife eventually agreed to transition patient to hospice due to persistent decline.

Due to the patient repeatedly testing positive for COVID19, the patient's family was not allowed to come to the hospital. The patient's wife struggled with the fact that she could not be physically present with her husband and expressed a tremendous amount of grief and suffering. The PCSW and the rest of the PCT worked doubly hard to provide patient's wife with support during this difficult time.

Palliative care social worker's role and interventions

Psychosocial support, communication, advocacy

PCSWs provide psychotherapeutic support for patients and families (National Association of Social Workers, 2004) to enhance quality of life, promote well-being, and alleviate biopsychosocial-spiritual suffering at end of life (Altilio & Otis-Green, 2007; Colon, 2007).

During this pandemic, our PCSW became the patient's and family's advocate in facilitating connection, lessening distress, and was the driving force in allowing end of life wishes to come to fruition (National Consensus Project for Quality Palliative Care, 2018; Alford & Chester, 2020). She provided psychosocial support through active listening and anticipatory grief counseling via phone, allowing the wife to process her emotional distress, and eventually cope with the impact of social isolation, and adaptation at end of life (Blackler & Christ, 2011).

Our PCSW also assisted in facilitating communication between the patient and his family via Telemedicine. Telemedicine has grown tremendously in the past decade, and with this pandemic, it has evolved into an essential measure to help provide healthcare to patients amid "shelter in place" and "social distancing".

Telemedicine technology was able to provide families and patients the ability to communicate via the 2-way audio and video through an iPad. Our PCSW assisted in obtaining a dedicated iPad that was left by patient's bedside so the family can speak with him anytime they wanted. Our patient's wife was thankful that she was given access to the video call. The wife stated, "I would be able to connect to the video, and I know he can hear me, so I will talk to him. However, even though it was difficult to hear his response, since his voice was too faint, I know he still appreciated hearing my voice, because he would wake up more whenever I talk".

Discharge Planning and Transition to Hospice

Our PCSW assisted with the transition of our patient to an inpatient hospice facility that accepted COVID19 patients. With the appropriate PPE, the patient's family was able to visit the patient, granting the wife's wish for a face-to-face visit before the patient died. A follow up phone call to the patient's wife by our PCSW revealed that the patient and his wife were able to share their final words together in person, achieving a sense of closure and peace. The patient's wife shared, "I can't thank you enough for what you did for us."

Legacy Projects

Our PCSW also assisted in creating legacy projects for the patient's family. Legacy reflects how we live our lives, and how we have impacted other people's lives. Legacy projects have been used to assist patients and families in creating memories, to remember their loved ones by (Collins, 2019). The beauty of legacy project, is the ability of patients and families to create the memorabilia together. However, with the current pandemic, creating legacy projects together was impossible. The PCSW provided the wife with information to create a memory book online to honor the patient's life and legacy (Newly Words, 2020).

The PCSW and the rest of the PCT was able to safely obtain patient's hand tracing that was etched on the glass of a picture frame, which included an original short poem for the family to cherish (see Figure 1). Laminated thumbprint cards with a special message and the patient's thumbprint were also created (see Figures 2&3). Patient's wife was very grateful and expressed appreciation for all the memorabilia given to her. She said, "Thank you so much for doing this for my kids and me. We can never repay all of you for these treasured mementos of my husband. They mean so much to our kids and of course to me as well. Again, thank you from the bottom of our broken hearts."

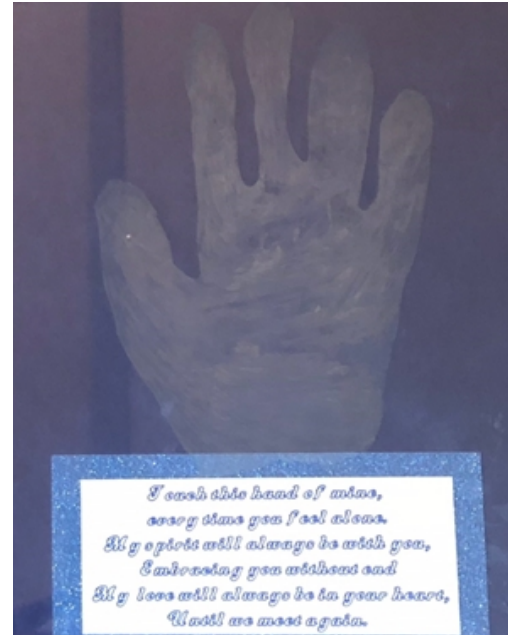


Fig. 1 Patient's hand etched on glass picture frame with original poem—"Touch this hand of mine, every time you feel alone. My spirit will always be with you, embracing you without end. My love will always be in your heart, until we meet again".

"Thank you so much for doing this for my kids and me. We can never repay all of you for these treasured mementos of my husband. They mean so much to our kids and of course to me as well. Again, thank you from the bottom of our broken hearts."
- Quote from patient's wife



Fig. 2 Thumbprint cards with original poem right next to the fingerprint written by palliative care team member—"My fingerprint on paper, To remind you of my love forever. My thumbprint is a remembrance, That we will always be together".

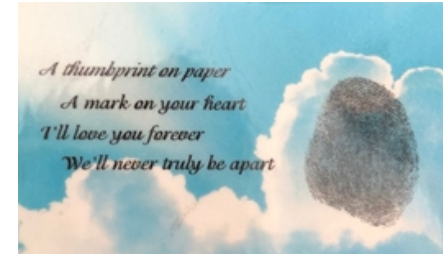


Fig. 3 Example of patient's thumbprint card given to family as part of legacy projects.

Palliative care social worker and chaplain as part of the palliative care interdisciplinary team

A palliative care team (PCT) is an interdisciplinary team that function as a unit. Teamwork is viewed as an essential function of the PCT (Fernando & Hughes, 2019). Healthcare teams have been shown to provide better care to patients than clinicians who work alone (Fernando & Hughes, 2019).

Our PCSW assisted our palliative care physician (PCP) in providing emotional support and expressive counseling to patient's wife, when poor prognosis was discussed. This allowed for patient's wife to have the courage to make decisions toward do-not-resuscitate (DNR) code status, comfort care measures and transitioning to hospice.

Palliative care chaplains (PCCs) assist the PCT by helping people cope religiously and spiritually when dealing with the stress of pain, chronic medical conditions, mental or emotional problems (Koenig, 2009). Our palliative care chaplain (PCC) and our PCSW comforted the patient's wife especially during times when she could not express the right words that would match her emotions and when she was struggling with not being able to be beside her husband. She said, "I have been there at the hospital every time he was a patient, and he needs me to be with him. I don't care about the risks; I just want to be near him." But because of our PCSW's and PCC's support, the patient's wife was able to find meaning from her grieving and was able to appropriately cope during patient's end of life.

Conclusion

Having a dedicated PCSW in the PCT during this time of COVID19 pandemic has been shown to be very beneficial for this patient's and his family's situation. The PCSW's utilization of resources, creativity and passion to assist patients and families during this unprecedented time has truly reflected her resilience and sustainability as an integral member of a PCT.

The telemedicine resources have allowed for the PCSW to find connections with and between patients and their families during this time of social distancing. The legacy projects allowed for the patient's family to find meaning in the memories they had with the patient. The psychosocial and spiritual care provided by our PCSW (in tandem with our PCC) were evidently valuable in supporting and guiding the patient's wife through her decision-making and grieving process. This case study epitomizes how flexible, resourceful and resilient PCSWs are during times of crisis.

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