

### [Abstract:0069]

### TREATMENT OF MALIGNANT BOWEL OBSTRUCTION IN PALLIATIVE CARE

Lazo Jordanovski, Jovanka Jakimovska, Pavlinka Milosavljevikj, Despina Miloshevska Evrushoska, Maja Spirova, Dima Ilieska, Monika Lukrovska, Lidija Pavleska, Lidija Veterovska Miljkovic, Biljana Petreska Zovic, Marika Ivanovska, Marija Sekovska

PHI Gerontology Institute "13th November", Skopje, Macedonia

Background: Malignant bowel obstruction (MBO) is ineffective motility or occlusion of the lumen that prevents bowel movements. MBO can be partial or complete. It's often a complication of advanced cancers, particularly primary abdominal or pelvic cancers(ovarian, cervical, colorectal, oesophageal) and can be a complication of metastatic disease from other primary cancers Aims: The purpose of this study is to show the treatment of malignant bowel obstruction, their similarities and differences. Methods: Retrospective analysis of patients hospitalized in our institution with malignant bowel obstruction and their treatment Results: In the last 5 years, 83 patients with partial (37 patients) or complete (46 patients) bowel obstruction were hospitalized in our palliative care department. Patients had symptoms such as nausea, vomiting, pain. The goal of treatment was to improve patients' quality of life. Patients with partial bowel obstruction were treated with prokinetics, steroids, antiemetics and analgesics while patients with complete bowel obstruction were treated with steroids, antisecretory agents, anticholinergics, antiemetics and analgesics.

Conclusion and Discussion: Our body produce 8-12 litres of secretions every day, but with bowel obstruction throughout GI tract our body won't be able to reabsorb those secretions. It is ideal if patient has a prognosis of years - we can completely resect and anastomose the bowel. But in palliative care when patients have a prognosis of months we must manage the symptoms in order to improve patients quality of life. Use of steroids and analgesics is justified in both types of bowel obstruction because their usage inflammatory process and pain is reduced.

**Keywords:** bowel, obstruction, palliative

### [Abstract:0409]

## BUILDING A FRAMEWORK OF PALLIATIVE CARE COMPETENCIES FOR INTERNAL MEDICINE RESIDENCY. A SCOPING REVIEW

<u>Manuel Araújo</u><sup>1</sup>, Ana Farinha<sup>2</sup>, Joana Mapril<sup>2</sup>, Ana Mateus<sup>2</sup>, Mafalda Grafino<sup>2</sup>, Manuel Capelas<sup>2</sup>

- <sup>1</sup> Universidade Católica Portuguesa, Faculty of Health Sciences and Nursing, Centre for Interdisciplinary Research in Health (CIIS); Centro Hospitalar Lisboa Ocidental, Hospital São Francisco Xavier, Internal Medicine Department/Palliative care team, Lisbon, Portugal
- <sup>2</sup> Universidade Católica Portuguesa, Faculty of Health Sciences and Nursing, Centre for Interdisciplinary Research in Health (CIIS), Lisbon, Portugal

**Objective:** The objective of this review is to list the basic palliative competencies that should be acquired throughout an internal medicine residency program.

Methods: This scoping review is based on JBI methodology. The search was conducted in December 2019. Inclusion Criteria: studies published in international data bases and grey literature in English, Spanish, French and Portuguese languages with no time limit with a clear description of competencies formulated for the internal medicine specialty.

Results: A total of 5032 records from international databases and 15 from grey literature were obtained for analysis. From these, 31 articles were included. A total of 1064 competencies were listed. These were sorted according to 7 domains: 1 clinical competency; 2 psychosocial issues; 3 ethical, legal aspects and professionalism competencies; 4 communication competencies; 5 teamwork competencies; 6 health system network related competencies; 7 competencies in education and evidence-based medicine. After sorting and simplifying the listing, we obtained a total of 248 competencies.

Conclusions: Internal medicine physicians provide palliative care to patients in their daily practice and have done so since ever. Whether one pursues specialization or not, all internists can, and should use, the growing knowledge of palliative medicine in their medical practice. With the data from this scope, we hope to provide a tool that contributes to the elaboration of a formal curriculum for the internal medicine specialty.

Keywords: internal medicine, internists, competencies, palliative care

### [Abstract:0532]

### COMPLICATIONS AND FORESEEABLE MORTALITY IN PATIENTS DECEASED IN THE PALLIATIVE CARE WARD OF OUR CENTER

<u>Bárbara Masegosa Navarro</u>, Raquel Rodríguez Rodríguez, Javier Gorospe García, Cristina Rubio Arcas, David Lozano Fernández, Ricardo Gómez Huelga

Department of Internal Medicine, Hospital Regional Universitario de Málaga, Málaga, Spain

We aimed to describe the most frequent circumstances surrounding death of patients deceased in our palliative care unit to provide better ways of care. We found that digestive tract pathologies were the most prevalent cause of admission (38.7%), followed by respiratory pathologies (17.9%). Complications occurred during admission in half of our patients, the most frequent being acute confusional syndrome (11.3%) and respiratory failure (8.5%). 71% of deaths were foreseeable, with neoplastic disease being the most frequent overall cause of death (84.9%). In 62% of the patients, palliative sedation was required before death.

We would like to highlight that palliative care units allow the application of measures aimed to prevent and alleviate the symptoms caused by a life-threatening disease and provide a better quality of life for these patients. Oncological disease is the main pathology monitored by these units, which also benefit patients in terminal stages of cardiac, respiratory or neurodegenerative diseases. These patients usually have a limited life expectancy in the short term because of their underlying disease and its complications and often require the application of palliative sedation measures.

We conclude that it is important to recognize which type of patients would benefit from admission to the palliative care ward to direct efforts to identify complications and alleviate their symptoms and that the complexity of these patients makes it difficult to pinpoint a specific cause of death, both in whom death was not foreseeable or because the patient's functional situation required an adjustment of the therapeutic effort before death.

Keywords: complications, mortality, sedation, palliative care

### [Abstract:0586]

### CLINICAL CHARACTERISTICS OF TERMINALLY ILL PATIENTS WHO DIE IN HOSPITAL

Carla Veredas Galdeano, <u>Carlos Ruiz Lucena</u>, Beatriz Martin Ramos, Montserrat Godoy Guerrero, Guadalupe Jarava Rol, Javier Ruiz-Rueda, Maria Aurora Ruz, Clara Hidalgo, Maria Angeles Gonzalez-Benitez

Department of Internal Medicine. Hospital de la Serranía, Ronda, Málaga, Spain

Objectives: To determine the clinical characteristics of terminally ill patients who die at the Department of Internal Medicine of Hospital de la Serranía (Ronda, Málaga).

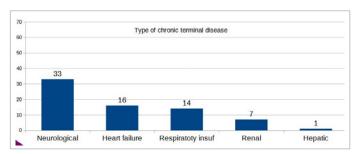
Materials and Methods: Descriptive study with retrospective data collection. Study population: patients who died at the Internal Medicine Department in 2019. Inclusion criteria: Being diagnosed with terminal oncological disease or with terminal chronic disease (with a score on the PALIAR index  $\geq$  7.5 points). Exclusion criteria: hospital stay of less than 24 hours' duration.

Results: 123 patients were included, 58 women (47.2%).

Mean age: 78.27 years (SD 11.86). Oncological patients: 73.21 years (SD 13.09). Chronic patients 83.61 years (SD 6.49). (p<0.001). Median hospital stay: 8 days (IR 3-16). Oncological patients 11 days (IR 4-17). Chronic patients 5 days (IR 3-12.5). (p=0.011). 52 patients (42.3%) had terminal oncological disease, 57 (46.3%) had terminal chronic disease and 14 patients (11.4%) had both types of terminal disease. Most frequent oncological diseases: colorectal (13, 10.6%), lung (11, 8.9%), gastric (6, 4.9%). Frequency of chronic disease: neurological impairment (33, 26.8%), heart failure (16, 13%), respiratory insufficiency(14, 11.4%), chronic renal failure (7, 5.7%) and liver cirrhosis (1, 0.8%). Mean PALIAR index score (chronic patients): 10.66 points (SD 2.79).

**Conclusions:** Chronic diseases and oncological diseases are equally common among terminally ill patients dying in hospital. We tend to be more aware of the palliative care needs of oncological patients. However, it is necessary to take into account the needs for care and for symptom control of our elderly patients with advanced chronic diseases.

**Keywords:** end of life, palliative care, last-days situation



**Figure 1.** Types of chronic terminal disease.

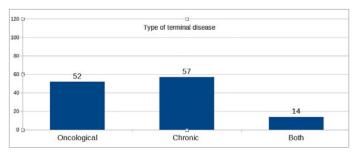


Figure 2. Types of terminal disease.

### [Abstract:0598]

# DIAGNOSTIC TESTS PERFORMED IN THE LAST 72 HOURS OF LIFE OF TERMINALLY ILL PATIENTS DYING IN HOSPITAL

Carlos Ruiz, Clara Hidalgo, Javier Ruiz-Rueda, Maria Aurora Ruz, Beatriz Martin Ramos, Carla Veredas Galdeano, Francisca Montserrat Godoy Guerrero, Guadalupe Jarava Rol, Maria Angeles Gonzalez-Benitez

Department of Internal Medicine, Hospital de la Serranía, Ronda, Málaga, Spain

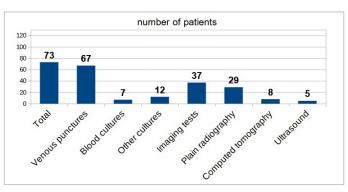
**Objective:** To determine the frequency of diagnostic tests performed in the last 72 hours of life of terminally ill patients who die at a general hospital.

Materials and Methods: Descriptive study with retrospective data collection. Study population: patients who died at the Internal Medicine Department in 2019. Inclusion criteria: Being diagnosed with terminal oncological disease or with terminal chronic disease (PALIAR index score ≥ 7.5 points). Exclusion criteria: hospital stay of less than 24 hours' duration.

Results: 123 patients were included, 58 women (47.2%). Mean age: 78.27 years (SD11.86). Median hospital stay: 8 days (IR3-16). Seventy-three patients (59.3%) underwent at least one diagnostic test in the last 72 hours of life, with a median of 2 diagnostic tests per patient (RI 2- 4) and a maximum of 9 in 2 patients (1.6%). Venous punctures for blood analysis were performed in 67 patients (55.5%), blood cultures in 7 patients (5.7%) and other cultures in 12 (9.8%). At least one imaging test was performed in the last 72 hours of life in 37 patients (30.1%): plain radiography in 29 patients (23.6%), computed tomography in 8 patients (6.5%), and ultrasound in 5 cases (4.1%).

Conclusions: A large number of diagnostic tests are performed in the last days of life of terminally ill patients who die in hospital. Tests performed are not considered invasive, but they cause unnecessary discomfort (without contributing to symptom control) and increase care expenses without any beneficial effect on patients. It is important to realize that limitation of therapeutic effort includes avoiding unnecessary diagnostic tests, even if they are not considered invasive.

Keywords: end of life, palliative care, last-days situation



**Figure 1.** Diagnostic tests performed in the last 72 hours of life of terminally ill patients.

Frequency of diagnostic tests performed in the last 72 hours of life of terminally ill patients who die at a general hospital.

### [Abstract:0623]

### **DYSPNEA: ABOUT A CASE**

<u>André Filipe Conchinha</u>, Sofia Cunha, Sofia Eusébio, Raquel Soares, Pedro Fiuza, José Sousa, Tiago Pack, António Santos

Hospital de Santa Marta, Centro Hospitalar Universitário de Lisboa Central, Lisboa, Portugal

Male, 83 years old, autonomous. History of hypertension and dyslipidaemia. He goes to the Emergency Department due to tiredness, with progressive worsening and a feeling of dyspnoea, with 2 months of evolution He was polypneic, on gasometry (without oxygen) with arterial oxygen pressure of 42 mmHg. Analytically with elevation of inflammatory parameters (CRP 170 mg/l). Chest CT with multiple adenopathies and suggestion of atypia. He does acid-alcohol resistant bacilli research in sputum, blood cultures and antigenuries that are revealed negative. Due to probable lung cancer, he was admitted to the Intensive Care for High-flow nasal cannula (HFNC) therapy, with partial improvement of hypoxemia. The case was discussed with Internal Medicine, Pulmonology, Oncology and Palliative Medicine, and considering poor general condition and locally advanced neoplasia, no further etiological studies were carried out, leaving only an indication for comfort measures. Due to respiratory difficulty refractory to HFNC, morphine infusion was eventually instituted, and he died 1 week after hospital admission.

Keywords: dyspnoea, lung cancer, palliative medicine

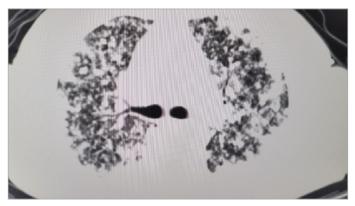


Figure 1. Chest CT.

### [Abstract:1066]

### TRENDS IN SPECIALIZED PALLIATIVE CARE REFERRALS AT THE ONCOLOGY UNIT

Perla Rodríguez García<sup>1</sup>, José Angel Garcia-Garcia<sup>2</sup>, Alba Sillero Herrera<sup>1</sup>, Elena González Pavía<sup>1</sup>, Estefanía Maestre Martín<sup>1</sup>, José A Mira Escarti<sup>2</sup>, Salvador Vergara-Lopez<sup>2</sup>

- <sup>1</sup> Department of Internal Medicine, University Hospital of Valme and Tomillar, Seville, Spain
- <sup>2</sup> Professor of Medicine. University of Seville, Department of Internal Medicine, University Hospital of Valme and Tomillar, Seville, Spain

Purpose: To describe the changes of referrals in advanced cancer patients from Oncology to a Palliative Care Unit (PCU).

Methods: Patients who were referral from Oncology Unit to a PCU between 2015 and 2022 were included in a descriptive and retrospective study. The variables analysed were type of neoplasm, cancer treatments at the time of referral, main referral symptom, degree of patient information, and admission recommended in acute or palliative hospital. Statistical analysis was performed clustering the patients on a biannual basis using IBM SPSS software.

Findings: A total of 2026 patients were included. Gastrointestinal cancers were the most frequently observed (38%). Pain was the most common symptom of referral (29%). An increase about prognosis information of cancer patients was observed (47% vs 64%; p<0.001). Cancer treatments were present in 42% of the individuals at the time of referral, with significant changes in the biannual analysis (38% vs 50%; p<0.001). There was a significant increase of patients with both oncological and palliative cares during the follow-up [(63% vs. 73%), p<0.001]. Recommendations of admission in an acute care hospital were also increased during the period of study [(19% vs. 25%), p<0.001, respectively].

Conclusions: Uncontrolled pain is the main symptom of referral from Oncology Unit to a PCU. An increase in cancer treatments, prognosis information of patients, both oncological and palliative support care and admission recommendation in an acute care hospital have been observed in the last years in advanced cancer patient's referral to a PCU.

Keywords: cancer, palliative care, referral

#### [Abstract:1425]

### POTENTIALLY INAPPROPIATE DRUGS ADMINISTERED IN THE 72 LAST HOURS OF LIFE OF TERMINALLY ILL ONCOLOGICAL PATIENTS WHO DIE AT HOSPITAL

Maria Angeles Gonzalez-Benitez, Montserrat Godoy Guerrero, Maria Aurora Ruz, Clara Hidalgo, <u>Carlos Ruiz</u>, Beatriz Martin Ramos, Javier Ruiz-Rueda, Carla Veredas Galdeano, Guadalupe Jarava Rol

Department of Internal Medicine. Hospital de la Serranía, Ronda, Málaga, Spain

Objectives: To determine the frequency of use of potentially inappropriate drugs in the treatment of terminally ill oncological patients who die at the Department of Internal Medicine of "Hospital de la Serranía" (Ronda, Málaga).

Materials and Methods: Descriptive study with retrospective data collection. Study population: patients who died at the Internal Medicine Department in 2019. Inclusion criteria: Being diagnosed with terminal oncological disease. Exclusion criteria: hospital stay of less than 24 hours' duration Definition of potentially inappropriate drugs (PID): those drugs that do not contribute to symptom control in terminally ill patients.

Results: 66 patients were included, 24 women (36.4%). Mean age: 73.21 years (SD 13.09). Median hospital stay: 11 days (IR 4-17). Median number of PID categories administered per patient: 3.28 (SD 2.11). Only 9 patients did not received PID. Administered PID were (descending order of frequency): omeprazole (52 patients, 78.8%), antihypertensive drugs 28 (42.4%), intravenous antibiotics 27 (40.9%), LMWH 25 (37.9%), inhaled bronchodilators 19 (28.8%), insulin 14 (21.2%), enteral nutrition 10 (15.2%), antiarrhythmic drugs 9 (13.6%), laxatives 8 (12.1%), antidepressants 6 (9.1%), nutritional supplements 5 (7.6%), oral antibiotics 4 (6.1%), antiaggregants 3 (4.5%), lipid-lowering therapy 3 (4.5%), oral anticoagulants 2 (3%), intravenous nutrition 2 (3%).

Conclusions: Our study shows a high prescription of potentially inappropriate drugs at the end of life in terminally ill oncological patients. These drugs do not contribute to patients comfort. Avoiding unneeded treatments may improve the quality of life in these final days. Potential benefits may be: reduction of adverse effects, reduction of discomfort related to drug intake, improvement of patients` rest and lower risk of artificially prolonging last-days` situation.

Keywords: end of life, palliative care, last-days situation

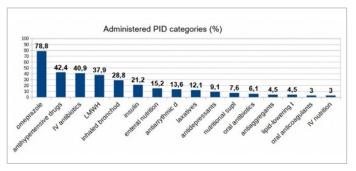


Figure 1. Administered PID categories (%).

This figure shows the frequency of administration of PID in the studied patients`last 72 hours of life.

| Number of PID categories | Frequency (n, %) |
|--------------------------|------------------|
| 0                        | 9 (13.6%)        |
| 1                        | 4 (6.1%)         |
| 2                        | 13 (19.7%)       |
| 3                        | 9 (13.6%)        |
| 4                        | 13 (19.7%)       |
| 5                        | 5 (7.6%)         |
| 6                        | 8 (12.1%)        |
| 7                        | 5 (7.6%)         |

**Table 1.** Number of PID categories administered per patient. This table shows how many PID categories were prescribed per patient.

### [Abstract:1439]

### COMPLEXITIES OF MANAGING END-OF-LIFE DIABETES CARE: THE REALITY IN A PALLIATIVE CARE WARD

<u>Teresa Abegão</u><sup>1</sup>, Teresa Tomásia Silva<sup>1</sup>, Mariana Antão<sup>1</sup>, Giovanni Cerullo<sup>2</sup>, Rafael Muñoz<sup>2</sup>, Carlos Cabrita<sup>1</sup>, Ana Baptista<sup>1</sup>, Dagoberta Lima<sup>3</sup>

- <sup>1</sup> Servico de Medicina Interna, Centro Hospitalar Universitário do Algarve, Faro, Portugal
- <sup>2</sup> Servico de Medicina Interna, Unidade de Cuidados Paliativos, Centro Hospitalar Universitário do Algarve, Faro, Portugal
- <sup>3</sup> Servico de Anestesiologia, Unidade de Cuidados Paliativos, Centro Hospitalar Universitário do Algarve, Faro, Portugal

Background and Aims: End-of-life care should prioritize comfort and symptomatic relief. However, in many wards, end-of-life patients receive standard population-based monitoring and medication. Although diabetes mellitus (DM) is a prevalent comorbidity in palliative Care (PC) patients, evidence on this topic is scarce.

This study aimed to investigate DM management among hospitalized palliative care (PC) patients, evaluating therapeutic approaches, including glycaemic monitoring and treatments, while assessing clinical outcomes.

Methods: A retrospective study, spanning August 2018 to August 2023, examined hospitalized PC patients with DM or altered glycemia (>200 mg/dL or <70 mg/dL). Parameters assessed encompassed gender, age, primary diagnosis, DM type, palliative performance scale (PPS), glycaemic monitoring (GM), corticosteroid therapy (CT), oral antidiabetic agents (OAD) or insulin usage, and outcomes.

Results: The study included 106 patients (56% male), averaging 74 years, predominantly diagnosed with neoplasms (87%) and 93% with type 2 DM. Among them, 68% received CT, with 7% experiencing DM associated with it.

The average PPS score was 35% ( $\pm 18\%$ ). GM initiated in 92%, later ceased in 48%. Insulin therapy commenced in 82% but discontinued in 45% due to declining PPS. Merely two patients received OAD. 86% passed away in the hospital, while 14 were discharged home.

**Discussion:** Discontinuation of GM and insulin aligned with declining PPS scores. The high mortality rate indicated severe conditions, possibly due to advanced neoplasms, impacting treatment choices. These findings underscore the pressing need for tailored EOL care guidelines for DM in PC, considering limited evidence and complex therapeutic adaptations based on individual prognosis and functional status.

Keywords: palliative care, diabetes mellitus, end-of-life management

### [Abstract:1591]

### REFERRAL OF IN-PATIENTS TO A HOSPITAL PALLIATIVE CARE TEAM

<u>Rafael Muñoz</u><sup>1</sup>, Giovanni Cerullo<sup>1</sup>, Margarida Carrancha<sup>1</sup>, Teresa Guedes<sup>1</sup>, Teresa Abegão<sup>2</sup>, Teresa Tomásia Silva<sup>2</sup>, Isabel V. Rodrigues<sup>2</sup>, Dagoberta Lima<sup>1</sup>

- <sup>1</sup> Palliative Care Unit, Centro Hospitalar Universitário do Algarve, Faro, Portugal
- <sup>2</sup> Internal Medicine Service, Centro Hospitalar Universitário do Algarve, Faro, Portugal

Background: According to the World Health Organization definition, palliative care (PC) aims to improve the quality of life of patients and their families facing challenges associated with serious chronic diseases. In this context, all individuals affected by such illnesses should have access to PC. The purpose of this study is to analyse the referrals directed to the Hospital Palliative Care Support Team (HPCST) of the Centro Hospitalar Universitário do Algarve.

Methods: A twelve-month quantitative, analytical, retrospective cross-sectional study was conducted. The referrals collected were analysed by age, sex, referring hospital service, reasons for referral, and patient outcomes.

**Results:** A total of 250 referrals were recorded, with 51.6% of patients being male, and an average age of 70.1 years.

The hospital service with the highest number of referral requests was Oncology (n=76), followed by Internal Medicine (n=49)

and Pulmonology (n=36). The primary reason for referral was symptom management (n=143).

Out of the requests made, 117 patients were transferred to the PC Unit, with 20 patients passing either before the first assessment by the PC team or within the first 24 hours following the initial evaluation. The remaining patients were discharged with PC follow-up.

Conclusions: Some patients were referred to our PC team in a very advanced stage of the disease, limiting therapeutic options for symptom management. There is a need for increased awareness among professionals regarding the recognition of PC needs in patients and their timely referral.

Keywords: palliative care, delayed referrals, palliative care needs

### [Abstract:1659]

### CHARACTERIZATION OF A PALLIATIVE CARE UNIT IN PORTUGAL

<u>Rafael Muñoz</u><sup>1</sup>, Giovanni Cerullo<sup>1</sup>, Dora Coelho<sup>1</sup>, Teresa Abegão<sup>2</sup>, Teresa Tomásia Silva<sup>2</sup>, Isabel V. Rodrigues<sup>2</sup>, Dagoberta Lima<sup>1</sup>

- <sup>1</sup> Palliative Care Unit, Centro Hospitalar Universitário do Algarve, Faro, Portugal
- <sup>2</sup> Internal Medicine Service, Centro Hospitalar Universitário do Algarve, Faro, Portugal

Background: Palliative care (PC) enhances the quality of life for those with serious chronic diseases, preventing and alleviating suffering through early identification and comprehensive treatment of physical, psychological, social, and spiritual issues. In-patient PC Units (PCU) specialize in complex symptom management for patients challenging to care for at home, including cases with family exhaustion or absent primary caregivers.

Methods: A twelve-month quantitative, analytical, retrospective cross-sectional study was conducted. The collected data were analysed by age, gender, Karnofsky Performance Status, source of admission, opioid use, drug administration routes, oncologic diagnosis, and post-discharge outcome.

Results: A total of 249 admissions to the PCU were recorded, predominantly male (53.8%), averaging 70.4 years. Most of PCU admissions were inpatients (37.7% from the Emergency Department, 45.4% from other services), a minority from the outpatient clinic (16.8%). Opioids were universally used, primarily transdermal (92%), oral (71.2%), intravenous (41%), and subcutaneous (26%). The most frequent oncologic diagnoses were colorectal neoplasia (22.9%), lung cancer (12.4%), and stomach cancer (8.4%). Hospitalization had a 75.5% mortality rate, with 24.5% transitioning post-discharge to the PC home team or PC outpatient clinic.

Conclusions: Inpatient palliative care (PC) is indicated for the management of complex symptomatology. Our casuistry revealed a high mortality rate during hospitalization, indicating not only the complexity and severity of symptoms in these patients but also the insufficient community resources to address their

needs adequately. Persistent late referrals for these patients emphasize the importance of continuous investment in healthcare professional training.

**Keywords:** palliative care, in-patient palliative care units, complex symptoms

### [Abstract:1672]

# USE OF PROPOFOL IN REFRACTORY SEDATION: WHEN MIDAZOLAM AND LEVOMEPROMAZINE ARE NOT ENOUGH

Barbara Soler Bonafont<sup>1</sup>, Carlos Rodríguez López<sup>2</sup>, Eduardo Garcia<sup>3</sup>

- <sup>1</sup> Internal Medicine Department, University Hospital Fundacion Jimenez Diaz, Madrid, Spain
- <sup>2</sup> Cardiology Department, University Hospital Fundacion Jimenez Diaz, Madrid, Spain
- <sup>3</sup> Palliative Care Department, University Hospital Fundacion Jimenez Diaz, Madrid, Spain

Introduction: Some patients undergoing palliative sedation may not respond satisfactorily to habitually used sedative medications (midazolam or levomepromazine) regardless of rapidly increasing doses. Some factors can make us suspect difficulty for sedation, especially when patients have previously taken benzodiazepines, when sedative medication dose must be increased quickly or when existential distress is the main symptom. So, we should have alternative sedative medications to get the required sedation degree. Propofol is an effective anaesthetic and sedative medication with short and fast action used in refractory delirium, nausea and anaesthetic for short procedures.

**Objectives:** To analyse propofol use as sedative in refractory sedation cases in a Palliative Care unit in a third level hospital.

Methods: We performed a descriptive retrospective study of all cases that required propofol for palliative sedation between May 2021 and May 2023. We considered refractory sedation as a poor response to more than 150 mg of midazolam and levomepromazine.

Results: Table 1 exposes findings. 7 patients required propofol, 5 patients had onco-hematologic disease. Propofol was used in combination with midazolam in all cases, in 5 cases also with levomepromazine. Refractory symptoms were epileptic status in 2 cases and psychological distress in 2 cases. Median time from start propofol until death was 24 hours

Conclusions: All patients got the required sedation degree with propofol and was useful and safe in onco-haematological and other diseases. Doses must be adapted to end of life situation and existential distress is a refractory symptom that could require use of propofol.

**Keywords:** palliative sedation, propofol, refractory symptoms, refractory sedation, existential distress

| Patient   | Age<br>(years) | Underlying disease    | Refractory symptom              | Dose the last<br>day of life<br>(mg/day) | Propofol induction | Time start-<br>proposed to<br>death (h) | Other sedative medications  |
|-----------|----------------|-----------------------|---------------------------------|--|--------------------|---|-----------------------------|
| Patient 1 | 57             | Lung cancer           | Multifactorial (pain, deltrium) | 7200                                     | No                 | 45                                      | Midazolam + Levomepromazine |
| Patient 2 | 67             | Neurocysticercosis    | Epilepticus status              | 2400                                     | No                 | 20                                      | Midazolam                   |
| Patient 3 | 54             | Anoxic encephalopathy | Epilepticus status              | 7200                                     | Si                 | 24                                      | Midazolam                   |
| Patient 4 | 47             | Colon cancer          | Pain                            | 12000                                    | Si                 | 78                                      | Midazolam + Levomepromazine |
| Patient 5 | 63             | Ovarian cancer        | Existential distress            | 2880                                     | Si                 | 31                                      | Midazolam + Levomepromazine |
| Patient 6 | 48             | Colon cancer          | Hyperactive delirium            | 3120                                     | No                 | 7                                       | Midazolam + Levomepromazine |
| Patient 7 | 55             | Lymphoma              | Existential distress            | 4800                                     | Si                 | 11                                      | Midazolam + Levomepromazine |

**Table 1.** Patient characteristics in whose propofol was used as sedative medication.

### [Abstract:1698]

### TEAM COLLABORATION ABOUT A CLINICAL CASE: WORKING TOGETHER IS THE VICTORY

<u>Rafael Muñoz</u><sup>1</sup>, Giovanni Cerullo<sup>1</sup>, Margarida Carrancha<sup>1</sup>, Teresa Guedes<sup>1</sup>, Teresa Abegão<sup>2</sup>, Teresa Tomásia Silva<sup>2</sup>, Isabel V. Rodrigues<sup>2</sup>, Dagoberta Lima<sup>1</sup>

- <sup>1</sup> Palliative Care Unit, Centro Hospitalar Universitário do Algarve, Faro, Portugal
- <sup>2</sup> Internal Medicine Service, Centro Hospitalar Universitário do Algarve, Faro, Portugal

**Background:** Caring for individuals with progressive and debilitating chronic illnesses presents a substantial challenge to a healthcare system traditionally oriented toward acute conditions. The introduction of Hospital at Home Units (HHU) in Portugal has addressed these challenges, aligning with the principles of palliative care (PC), a multidisciplinary model focused on preventing and alleviating suffering across its different domains. This study explores the collaborative efforts among diverse teams in providing the best care for these patients, using a clinical case as an illustration.

Methods: The case presented concerns a 64-year-old patient named D.M.F. with a history of endometrial carcinoma. After presenting to Emergency Department, a metastasis of adenocarcinoma of gynaecological origin was identified. The patient was transferred to the care of the Oncology Service and, due to complications, proposed for HHU admission to continue therapy at home. The assessment by the Hospital Palliative Care Support Team was crucial, and after stabilization, the patient was referred to the Palliative Care Home Team.

Discussion and Conclusions: This case highlights the importance of recognizing PC needs and promoting collaboration between intra and extra-hospital teams. Effective coordination ensured the seamless provision of care, emphasizing a humanized approach to home care, enhancing patient comfort, and actively engaging caregivers. HHU emerges as a viable strategy for optimizing hospital bed utilization, facilitating comprehensive home-based care. Strengthening team collaboration is essential, prioritizing the reduction of hospital admissions and ensuring timely referrals to the home care teams.

Keywords: palliative care, hospital at home units, team collaboration

### [Abstract:1708]

from referral to death.

# DELAY IN REFERRAL OF ONCOLOGICAL PATIENTS TO PALLIATIVE CARE IN A UNIVERSITY HOSPITAL

Rafael Muñoz<sup>1</sup>, Giovanni Cerullo<sup>1</sup>, Teresa Abegão<sup>2</sup>, Teresa Tomásia Silva<sup>2</sup>, Isabel V. Rodrigues<sup>2</sup>, Dagoberta Lima<sup>1</sup>

- ¹ Palliative Care Unit, Centro Hospitalar Universitário do Algarve, Faro, Portugal
- <sup>2</sup> Internal Medicine Service, Centro Hospitalar Universitário do Algarve, Faro, Portugal

Background: Palliative care (PC) is specialized medical care that focuses on providing relief from pain and other symptoms of a serious illness, aiding in coping with treatment side effects, irrespective of the potential for a cure for the medical condition. This study aims to analyse the delay in the referral of oncology patients from the date of diagnosis to their first visit to the PC team, whether in a hospital setting or during out-patient consultation.

Methods: A six-month quantitative, analytical, retrospective cross-sectional study was conducted. Referrals were analysed based on age, sex, oncologic diagnosis at referral, presence of metastasis, time elapsed from diagnosis to referral, and duration

Results: A total of 61 were recorded, with 50.8% being male. The average age was 69.4 years. Oncology (50.8%), pulmonology (18.0%), and internal medicine (13.1%) had the most referrals. The initial contact with the palliative care team was made through inpatient admission (50.8%), outpatient clinic (47.5%), and community palliative care team (1.6%). At diagnosis, 67.2% of patients presented with metastases. The average time from diagnosis to the first referral was 463 days, and the average time from the first referral to death was 71 days.

Conclusions: Despite most patients being metastatic at diagnosis, referral to PC was significantly delayed, reflecting medical inertia and healthcare professionals' lack of awareness of the needs of these patients. Oncology predominates in referrals, stressing the need for recognition across other medical specialties. Timely referrals are crucial for enhancing patient quality of life.

Keywords: palliative care, referral delay, medical inertia

#### [Abstract:1766]

# ANALYSIS OF IN-PATIENT REFERRALS TO A PALLIATIVE CARE TEAM IN A UNIVERSITY HOSPITAL

<u>Rafael Muñoz</u><sup>1</sup>, Giovanni Cerullo<sup>1</sup>, Margarida Carrancha<sup>1</sup>, Teresa Guedes<sup>1</sup>, Teresa Abegão<sup>2</sup>, Teresa Tomásia Silva<sup>2</sup>, Isabel V. Rodrigues<sup>2</sup>, Dagoberta Lima<sup>1</sup>

- <sup>1</sup> Palliative Care Unit, Centro Hospitalar Universitário do Algarve, Faro, Portugal
- <sup>2</sup> Internal Medicine Service, Centro Hospitalar Universitário do Algarve, Faro, Portugal

Background: Palliative care (PC) is dedicated medical support aimed at alleviating pain and symptoms in serious illnesses, and assisting patients in managing treatment side effects, regardless of the possibility of a cure. This research seeks to analyse the characteristics of the in-patients referred for the Hospital Palliative Care Support Team (HPCST) by other hospital services. Methods: A six-month quantitative, analytical, retrospective cross-sectional study was conducted. Referrals were analysed based on age, sex, referring hospital service, reasons for referral, identified additional needs, time elapsed from referral to the first visit of the HPCST, and post-evaluation outcome.

Results: A total of 176 referrals were recorded, with 55% being male. The average age was 70.8 years. Oncology (27%), Surgery (27%), and Internal Medicine (22%) had the most referrals. The main reasons for referral were symptom management (37%, especially pain, nausea-vomiting, and anorexia-cachexia syndrome), shared decision-making (26%), and psychological support for patients' relatives (12%). In 69% of cases, additional needs were identified, with symptom distress (35%, highlighting pain, asthenia, and dyspnoea), imminent death syndrome, and shared decision-making (6%) being notable. The average time from referral to the first visit of the HPCST was 1.15 days.

Conclusions: Some patients are referred to the HPCST in a very advanced stage of their diseases, limiting their therapeutic options for symptom management. In this context, there is a critical need to increase awareness among healthcare professionals regarding the identification of patients' palliative care needs, promoting timely referrals.

Keywords: palliative care, palliative care needs, timely referral

### [Abstract:1790]

### POTENTIALLY INAPPROPRIATE DRUGS ADMINISTERED IN THE 72 LAST HOURS OF LIFE OF TERMINALLY ILL CHRONIC PATIENTS WHO DIE AT A GENERAL HOSPITAL

Maria Angeles Gonzalez-Benitez, Guadalupe Jarava Rol, Carla Veredas Galdeano, <u>Carlos Ruiz</u>, Javier Ruiz-Rueda, Montserrat Godoy Guerrero, Clara Hidalgo, Beatriz Martin Ramos, Maria Aurora Ruz

Department of Internal Medicine. Hospital de la Serranía, Ronda, Málaga, Spain

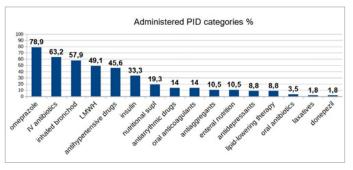
Objectives: To determine the frequency of use of potentially inappropriate drugs in the treatment of terminally ill chronic patients who die at the Department of Internal Medicine of "Hospital de la Serranía" (Ronda, Málaga).

Materials and Methods: Descriptive study with retrospective data collection. Study population: patients who died at the Internal Medicine Department in 2019. Inclusion criteria: Being diagnosed with terminal chronic disease with a PALIAR index score ≥ 7.5 points. Exclusion criteria: hospital stay of less than 24 hours' duration Definition of potentially inappropriate drugs(PID): those drugs that do not contribute to symptom control in terminally ill patients.

Results: 57 patients were included, 34 women (59.6%). Mean age: 83.61 years (SD 6.49). Median hospital stay: 5 (IR 3-12.5). Median number of PID categories administered per patient: 4.19 (SD 2.45). Only 7 (12.3%) patients did not received PID. Administered PID were: omeprazole (45 patients, 78.9%), intravenous antibiotics 36 (63.2%), inhaled bronchodilators 33 (57.9%), LMWH 28 (49.1%), antihypertensive drugs 26 (45.6%), insulin 19 (33.3%), nutritional supplements 11 (19.3%), antiarrhythmic drugs 8 (14%), oral anticoagulants 8 (14%), antiaggregants 6 (10.5%), enteral nutrition 6 (10.5%), antidepressants 5 (8.8%), lipid-lowering therapy 5 (8.8%), oral antibiotics 2 (3.5%), laxatives 1 (1.8%), donepezil 1 (1.8%).

Conclusions: Our study shows a high prescription of PID at the end of life. It is important to reassess patient's needs throughout admission in order to adapt treatment to worsening prognosis. Avoiding unneeded treatments may improve the quality of life in these final days. Potential benefits may be: reduction of adverse effects, reduction of discomfort related to drug intake, improvement of patients' rest and lower risk of artificially prolonging last-days situation.

Keywords: end of life, palliative care, last-days situation



**Figure 1.** Frequency of administered categories of potentially inappropriate drugs in the last 72 hours of life of terminally ill chronic patients.

| Number of PID categories administered per patient | Frequency | Percentage |
|---|-----------|------------|
| 0   | 7         | 12.3       |
| 1   | 1         | 1.8        |
| 2   | 6         | 10.5       |
| 3   | 8         | 14         |
| 4   | 8         | 14         |
| 5   | 9         | 15.8       |
| 6   | 9         | 15.8       |
| 7   | 3         | 5.3        |
| 8   | 4         | 7          |
| 9   | 2         | 3.5        |

**Table 1.** Number of categories of potentially inappropriate drugs administered per patient in the last 72 hours of life of terminally ill chronic patients.

### [Abstract:1832]

### CANCER CACHEXIA ASSOCIATED WITH GASTROESOPHAGEAL ADENOCARCINOMA

Daniel Ávila Royón, <u>Víctor Urbaneja Zumaquero</u>, Salvador Martín Cortés, Eduardo Manuel Cebreros Cuberos

Virgen de la Victoria University Hospital, Internal Medicine, Málaga, Spain

Case Description: A 73-year-old man, previous history of active smoking. Presented with a 2-week dyspnoea on minimum efforts and orthopnoea. Involuntary weight loss of 10 Kilograms with a 2-month history of progressive dysphagia to solid foods only, not associated to nausea and vomiting. Blood test showed dissociated cholestasis and chest radiograph showed miliary interstitial lung pattern.

Clinical Hypothesis: Chronic obstructive pulmonary disease exacerbation, tuberculosis, atypical pneumoniae, systemic autoimmune diseases, primary neoplasm.

Diagnostic Pathways: No microorganism was isolated from the biological samples. Neither markers of autoimmune diseases were present. Thoracic and abdominal computed tomography scan showed diffuse pulmonary nodules with spiculated margins suggestive of metastases and bilateral pleural effusion, findings in lymphangitic carcinomatosis, multiple hepatic lesions suggestive of metastases, sclerotic bone metastases involving the L2 and

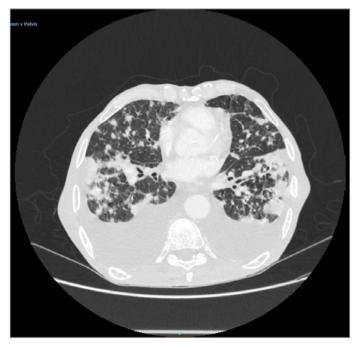
L3 vertebrae, a solid lesion of the gastroesophageal junction (GEJ), with heterogeneous contrast enhancement, as a probable primary malignant tumour and severe muscle mass depletion. An upper endoscopy showed an excreting lesion of the distal oesophagus infiltrating the subcardial area. This finding was highly suggestive of malignant neoplasm of GEJ (Siewert type II). Anatomopathology demonstrated invasive adenocarcinoma of the GEJ. The immunohistochemical study showed HER-2/neu over-expression.

Discussion and Learning points: He had a stage IV GEJ cancer. Unfortunately, due to advanced-stage diagnosis and severely disabled, an active treatment was not available. This clinical case led us to reflect on the constitutional syndrome and less common causes of dyspnoea. Palliative care team was activated for symptom relief, support of caregiver needs and coordination of care.

**Keywords:** constitutional syndrome, dysphagia, gastroesophageal junction cancer, pulmonary lymphangitis carcinomatosis, metastasis



**Figure 1.** Chest X-ray: miliary interstitial lung pattern.



**Figure 2.** Thoracic CT scan: diffuse pulmonary nodules with spiculated margins suggestive of metastases, bilateral pleural effusion and findings in lymphangitic carcinomatosis.



**Figure 3.** Abdominal CT scan: multiple hepatic lesions suggestive of metastases, sclerotic bone metastases involving the L2 and L3 vertebrae, a solid lesion of the gastroesophageal junction with heterogeneous contrast enhancement and severe skeletal muscle mass and adipose tissues depletion.



**Figure 4.** Abdominal CT scan: multiple hepatic lesions suggestive of metastases, sclerotic bone metastases involving the L2 and L3 vertebrae, a solid lesion of the gastroesophageal junction with heterogeneous contrast enhancement and severe skeletal muscle mass and adipose tissues depletion.

### [Abstract:1935] TREATING DYSPNEA IN PALLIATIVE CARE SETTINGS

Jovanka Jakimovska, Lazo Jordanovski, Pavlinka Milosavljevikj, Despina Miloshevska Evrushoska, Maja Spirova, Dima Ilieska, Monika Lukrovska, Lidija Pavleska, Lidija Veterovska Miljkovic, Biljana Petreska Zovic, Marika Ivanovska, Marija Sekovska, Lidija Pavlovska, Lidija Malinovska, Selma Eminoska Rustemi, Jorde Simonoska, Elena Brezovska

PHI Gerontology Institute "13th November", Skopje, Macedonia

**Background:** Dyspnoea is defined as subjective difficulty of breathing or simply shortness of breath. Patients with dyspnoea have a shorter five-year survival than patients with reduced forced expiratory volume in one second. It's very common in patients approaching the end of their lives.

Aim: The purpose of the study is to show the way in which patients with dyspnoea hospitalized in our hospice described it, the clinical picture of dyspnoea as well as the method of treatment.

Methods: Retrospective analysis of patients hospitalized in our hospice with dyspnoea and their treatment for 3 year period.

Results: Patients described dyspnoea in a variety of terms: "I'm really tight in my chest" (72%),"I'm hungry for more air" (68%), "I can't get a good breath" (54%), "I'm suffocating. Oh, my goodness" (43%), "It's really hard to breathe. This is really heavy work" (38%). When we treat dyspnoea, we first treat the cause that led to it mostly respiratory (pneumothorax, pneumonia, aspiration, ARDS, pulmonary embolism) or cardiac (congestive heart failure, pulmonary oedema, infarction, arrhythmia). Low-dose opioids and some non-pharmacological methods (pulmonary rehabilitation and education, relaxation methods, repositioning) were used to

improve breathing, resulting in a decrease in dyspnoea in patients. Conclusions: Quality of life is most important in palliative care. Low dose opioids with their effect on the central and peripheral nervous system improve the signs of dyspnoea, do not reduce tachypnoea, but patients' feeling is improved. Treatment of the underlying cause that led to the dyspnoea should never be forgotten.

Keywords: dyspnoea, palliative, opioids

### [Abstract:1967]

# ANALYSIS OF CLINICAL AND THERAPEUTIC FACTORS IN ONCOLOGICAL PATIENTS WHO REQUIRE PALLIATIVE SEDATION IN A SPECIALIZED HOSPITALIZATION WARD

Julia Ollero Ortiz<sup>1</sup>, Julia Fernández Soto<sup>2</sup>, Alicia Rosado Suárez<sup>1</sup>, Resfa García Font<sup>2</sup>, Maryam Sidahi Serrano<sup>2</sup>

- <sup>1</sup> Internal Medicine Service, Infanta Elena Hospital, Huelva, Spain
- <sup>2</sup> Internal Medicine Service, Juan Ramón Jimenez Hospital, Huelva, Spain

Objectives: To analyse the main tumours, symptoms as well as type, number of drugs, route of administration and duration of palliative sedation perfusion in a hospital setting in a group of patients within a specific Palliative Care unit.

Methods: Retrospective descriptive analysis of 308 deceased cancer patients who required palliative sedation in a Palliative Care hospitalization ward between 2019 and 2023.

Results: The three most frequent neoplasms were lung (77 cases), Colorectal-anus (33) and Pancreas (31 cases). The main reason that justified palliative sedation was agony (50.6%), followed by dyspnoea (17.5%), delirium (10.7%) and refractory pain (9.1%). 17.53% showed ≥2 refractory symptoms concomitantly. Informed consent was always requested verbally, given 84.4% cases by the family, and 14.3% by the patient.

Midazolam was used as a sedative drug in 96.1% followed by Levomepromazine (3.9%). Mean doses used were  $48.1\pm20.9$ mg and  $59.1\pm34.3$ mg. Morphic chloride was used in 98.4% ( $70.6\pm54.8$  mg). Antisecretory were used in 95.8% of patients; firstly scopolamine (82.5%) followed by hyoscine butylbromide (13.3%). Haloperidol was used in 23.4% cases. The subcutaneous route was used more than (56.2% of cases) the intravenous route. The mean infusion duration was 34.9 hours (1 hour to 216 hours).

Conclusions: Lung cancer and agony were the most frequent tumour and refractory symptom to initiate palliative sedation. The family gave consent in most cases. It was used 3.1 drugs on average. Midazolam is the most used sedative drug. Antisecretories were used in almost patients. The subcutaneous route constitutes an effective alternative for symptomatic control in most patients.

Keywords: palliative sedation, refractory symptoms, sedation drugs

### [Abstract:2049]

INFLUENCE OF AN ACTIVE INFECTIOUS PROCESS AND THE USE OF ANTIBIOTICS ON THE INITIATION OF PALLIATIVE SEDATION IN CANCER PATIENTS UNDER END-OF-LIFE CARE ADMITTED TO THE INTERNAL MEDICINE WARD IN A FIRST-LEVEL HOSPITAL

<u>Pedro Martinez Garcia</u>, Mercedes Gomez Hernandez, Sofia Delgado Romero, Francisco Garcia Colchero, Antonio Fernandez Moyano

Internal Medicine, San Juan de Dios del Aljarafe Hospital, Seville, Spain.

**Background and Aims:** Infections are frequent in oncological patients and antibiotics are often used, even though with a variable use and associated to multiple dilemmas.

Our objective is to analyse the influence of an active infectious process and the initiation of antibiotic therapy on the decision to initiate palliative sedation or adequate the therapeutic effort.

Methods: Observational, cross-sectional and retrospective study of all palliative cancer patients with concurrent infectious disease who died between January-February 2019 in a first-level hospital. Association between the clinical variables and the use of antibiotics and need of palliative sedation or adequate therapeutic effort were analysed.

Results: Statistical significance was found between the use of palliative sedation and the administration of antibiotics (p=0.043), the presence of metastases (p=0.006) and the location of the infection (p=0.021). There was no statistical significance for the adequacy of therapeutic effort(p=0.884). Regarding the need for palliative sedation, statistical significance was found with the presence of pain (p=0.001), salvage therapy (p=0.024) and the need of increasing the dose of salvage therapy (p=0.021). No statistical significance was found for the presence of dyspnoea, agitation, fever or secretions.

Conclusions: The main variables for initiate palliative sedation were the use of antibiotic, the presence of metastases, the location of infection and the presence of pain. There was no statistically significant difference between the parameters assessed and the adequacy of therapeutic effort. Deeper studies of these associations are needed to establish which patients may benefit most of beginning antibiotic therapy in case of active infection.

Keywords: palliative care, antibiotic, sedation, therapeutic effort

### [Abstract:2082]

# ARE PROFESSIONALS RIGHT WHEN THEY CONSIDER IF THEIR PATIENT WILL DIE IN THE NEXT YEAR? USE OF HOSPITAL RESOURCES SND ONE-YEAR MORTALITY IN PEOPLE OVER 65 WITH NON-ONCOLOGIC PALLIATIVE CARE NEEDS

Jose Maria Alonso De Los Santos, Alba Aguilar González, Ismael Herrero Lafuente, Heysa Estefany Mencía Chirinos, Pamela Dennisse Bedoya Riofrio, Sonia Martín Rodríguez, Irene Arrollo Jimenez, Eva María Ferreira Pasos

Department of Internal Medicine, Segovia, Spain

Background: The need for palliative care continues to be underdetected. Screening tools (NECPAL 4.0) can help to identify palliative care beneficiaries. Our objective is to study the correlation with mortality and the use of hospital resources one-year after detection of palliative needs.

Methods: Retrospective cross-sectional study in which the NECPAL 4.0 tool was applied to patients over 65 years admitted for non-oncologic pathology to the C.A. Segovia Hospital, with a 1-year follow-up.

Results: 80 patients (68.8% women, 88 median age). Palliative needs were identified (NECPAL 4.0 positive) in 53% (43) during admission and in 46.9% upon discharged.

Of the patients who would not surprise the physicians if they died in the next year (NECPAL criteria), 81.2% died in the current admission (vs. non-NECPAL, p 0.001). Mortality at one-year was 32.8% (93% at 6 months being palliative, 85.7% at one year) (p<0.0001).

The NECPAL group was attended in the emergency department a total of 47 times and accumulated 27 hospital admissions. The mean number of days to first attendance was significantly lower in the NECPAL group (44 days, vs. 95 days) (p<0.0001). Mortality at first readmission was 44% in palliative (vs 6.25%, p<0.0001).

Conclusions: Healthcare professionals who would not be surprised if their patient died the next year were correct in more than 85% of cases. Identifying people with palliative needs can help physicians to tailor the care they receive, as the NECPAL 4.0 score correlates with in-hospital and one-year follow-up mortality. Hospital consultation remains high in those who require palliative care.

Keywords: palliative care, non-oncologic, prognosis, mortality, NECPAL

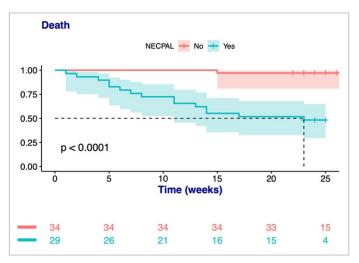


Figure 1. Kaplan-Meier survival curves in NECPAL.

### [Abstract:2201]

### A RARE CASE: REFEEDING SYNDROME

Emre Cem Gokce, Feray Akbas

Department of Internal Medicine, University of Health Sciences, Istanbul Training and Research Hospital, Istanbul, Turkey

Introduction: Refeeding syndrome is a dangerous consequence of metabolic/biochemical changes resulting from rapid/overfeeding of individuals experiencing severe malnutrition. Chronic malnutrition(cancer, elderly), starvation, anorexia, alcoholism are major reasons. Feeding after starvation induces insulin secretion with rapid glucose load and water, Mg, K, phosphate and glucose uptake into cells, leading to a decrease in their blood levels.

Case Presentation: A 71-year-old-male patient with larynx carcinoma + lung metastasis (tracheostomized)+hypertension was admitted for aspiration pneumonia. His general condition was poor, with cachexia and crepitant rales. Lab: WBC: 14,850 mm<sup>3</sup>, Plt: 253,000 mm<sup>3</sup>, Hb: 10 g/dl, FBG: 88 mg/dl, urea: 61 mg/dl, creatinine: 1 mg/dl, LDH: 507 U/L, total protein: 6.4 g/L, albumin: 3 g/L, CRP: 397 mg/L, PCT: 9.26 ng/mL, Na: 131 mmol/L, K: 3.05 mmol/L, Ca: 8.3 mmol/L. Blood-gas-analysis: metabolic alkalosis. Treatment included piperacillin-tazobactam 3x4.5 g, LMWH, irbesartan-chlorothiazide 10/12.5 mg, resource protein 3x1 and vital formula 3x1 (in addition to oral feeding). Despite daily potassium replacement, the patient's potassium level remained low. Spironolactone was added and a potassiumrich nutrition regimen was initiated. Magnesium and calcium were also replaced. Tracheal aspirate culture revealed E. coli, and meropenem was started. Despite potassium replacements (4 amp KCl daily), potassium level persisted below 3 mmol/L (minimum 2.58 mmol/L).

Refeeding syndrome was considered, prompting the initiation of low-calori-nutrition under the guidance of our nutrition team. The plan included two-days-of-full TPN, two-days-of-half TPN and a gradual reduction to 40 ml/hour on the fifth day and 20 ml/hour on the sixth day. TPN was then stopped, and a high-protein regime was implemented. Infection and intravenous potassium requirements

improved and intravenous potassium was discontinued (K: 3.38 mmol/L without replacement).

**Conclusions:** Refeeding syndrome is a treatable but dangerous condition. Providing slow and controlled nutritional support for cachectic patients is crucial to prevent the occurrence of refeeding syndrome.

Keywords: refeeding syndrome, hypopotassaemia, nutrition support

### [Abstract:2322]

# THE VALUE OF SOCIAL INTERVENTION IN AN ONCOLOGICAL PALLIATIVE CARE HOSPITALIZATION UNIT

Julia Ollero Ortiz<sup>1</sup>, Julia Fernández Soto<sup>2</sup>, <u>Paula Carlota Rivas Cobas</u><sup>1</sup>, Resfa García Font<sup>2</sup>. Elisabet García Pérez<sup>3</sup>

- <sup>1</sup> Internal Medicine Service, Infanta Elena Hospital, Huelva, Spain
- <sup>2</sup> Internal Medicine Service, Juan Ramón Jimenez Hospital, Huelva, Spain
- <sup>3</sup> Social Worker. Juan Ramón Jiménenz Hospital, Huelva, Spain

Introduction: Oncological patients who are in a Palliative Care Program present a situation of vulnerability, lack of autonomy as they have many biological, emotional, spiritual, and social needs. The hospital social worker analyses the deficiencies and social needs that may affect the health-disease process, identifying the family and social support network and promoting the use of environmental resources for the hospitalized patient.

Objectives: To describe the type of social intervention carried out by the social worker of our Center, as an integral part of our multidisciplinary team, in oncological patients hospitalized in a specific Palliative Care Unit.

Methods: Retrospective descriptive study of patients admitted to our Palliative Care hospitalization ward, from November 2021 to March 2022, who required resource management by our social worker.

Results: Four patients benefited from the coordination work of community social services. The Dependency Law was processed in one case. A residential resource was managed upon discharge for another one. Five patients have been monitored, in coordination with social workers from the different primary healthcare centres and hospital centres in the patient's reference area. Four charity burials have been arranged, one of them abroad (Dakar), in coordination with primary healthcare centre social worker and Social Services Center of the City Council.

Conclusions: Oncological patients admitted to a Palliative Care Unit require early detection and a multidisciplinary approach to their psychosocial needs. This interdisciplinary work can improve the quality of life of the patient, as well as their family and those closest to them ones.

**Keywords:** social worker, environmental resources, community social services

#### [Abstract:2488]

### SUBCUTANEOUS ACETAMINOPHEN ADMINISTRATION IN PALLIATIVE CARE: A LITERARY REVIEW

Juan Carlos Perdomo Puentes

Internal medicine, Lisboa, Portugal

Objective: To characterize scientific articles related to the use of subcutaneous paracetamol in palliative care patients regarding safety and therapeutic efficacy.

Methods: This is a systematic literature review carried out in the Cochrane, Lilacs, PubMed and Scielo databases, using the terms "acetaminophen", "paracetamol", "subcutaneous" and "palliative". Articles in Portuguese, Spanish, French and English with available abstracts published between 01-01-2009 and 30-09-2022 were searched.

Results: 302 articles were identified using the terms "acetaminophen", "paracetamol", "subcutaneous" and "palliative". Of these, 289 were available on PubMed, 7 on Cochrane, 4 on Scielo and 2 on LILACS. After the final selection, six articles of various types were included, three of which were experimental with patients, one was a randomized, open, crossover study, one was a questionnaire survey sent to doctors and one was a multicentre prospective observational study.

The selected articles demonstrated the safety and efficacy of subcutaneous paracetamol use in palliative care as well as adverse effects, dosage and health professionals' perception of use.

Conclusions: Subcutaneous administration of acetaminophen is effective and well tolerated in geriatric and palliative care patients, especially for home-based care when no other route is available. According to studies, it was effective in controlling pain with low undesirable effects. However, clinical studies related to subcutaneous paracetamol administration in palliative care context were limited and more studies are needed to document the efficacy and safety of subcutaneous paracetamol.

Keywords: acetaminophen, paracetamol, subcutaneous, palliative

### [Abstract:2506]

### ETHICAL ASPECTS OF PARENTERAL HYDRATION IN PALLIATIVE CARE

Nicoleta Dima, Ana Roxana Ganceanu Rusu, Andreea Clim, Daniela Maria Tanase, Anca Ouatu, Minerva Codruta Badescu, Diana Popescu, Oana Nicoleta Buliga Finis, Evelina Maria Gosav, Oana Bogdana Barboi, Minela Aida Maranduca, Ciprian Rezus

"Grigore T. Popa" University of Medicine and Pharmacy Iasi, Iasi, Romania

Introduction: The transition to eternal life for every human being is an inevitable event that can only be postponed for a finite time. The passing of a human being should be dignified, without unnecessary suffering, in comfort and peace, when all dynamic

assessments demonstrate the futility of any medical intervention, no matter how well-intentioned and supported it may be.

Materials and Methods: The paper presents a literature review on parenteral hydration and the presence of metabolic changes (malnutrition), as well as their impact on the quality of life of patients in palliative care. The decision to administer or not parenteral nutrition and hydration is one of the essential issues clinicians face. Although the fundamental ethical principles underlying palliative care focus precisely on achieving the best possible quality of life for the patient and their family, there are situations where these interventions bring no benefit, raising ethical issues regarding the differences between the patient's and the family's desires compared to the opinions of the medical team. Conclusions: Parenteral nutrition and hydration remain a controversial subject, involving multiple ethical, medical, and emotional issues. The role of the physician is to uphold essential ethical principles in palliative medicine, ensuring the patient's quality of life and respecting their dignity until the last moment.

Keywords: palliative care, medical ethics, parenteral nutrition, death

### [Abstract:2852]

# A PRELIMINARY STUDY: NEUROLOGICAL, IMMUNOLOGICAL, AND ENDOCRINE ASPECTS OF HEALTHCARE WORKERS WITHOUT BURNOUT SYNDROME

Yanuar Ardani<sup>1</sup>, Hamzah Shatri<sup>2</sup>, Sukamto Koesnoe<sup>3</sup>, Em Yunir<sup>4</sup>, Tjhin Wiguna<sup>5</sup>, Heri Wibowo<sup>6</sup>, Dian Ratna Sawitri<sup>7</sup>, Sugeng Joko Sarwono<sup>8</sup>, Muchtaruddin Mansyur<sup>9</sup>, Ivona Oliviera<sup>10</sup>

- <sup>1</sup> Psychosomatic and Palliative Division, Department of Internal Medicine. Faculty of Medicine Diponegoro University - Kariadi General Hospital, Central Java, Indonesia
- <sup>2</sup> Psychosomatic and Palliative Division, Department of Internal Medicine, Faculty of Medicine University of Indonesia- Cipto Mangunkusumo Hospital, Jakarta, Indonesia
- <sup>3</sup> Allergy Immunology Division, Department of Internal Medicine, Faculty of Medicine University of Indonesia- Cipto Mangunkusumo Hospital, Jakarta, Indonesia
- <sup>4</sup> Metabolic Endocrinology division, Department of Internal Medicine, Faculty of Medicine University of Indonesia- Cipto Mangunkusumo Hospital, Jakarta, Indonesia
- <sup>5</sup> Departement of Psychiatry, Faculty of Medicine University of Indonesia-Cipto Mangunkusumo Hospital, Jakarta, Indonesia
- <sup>6</sup> Departement of Parasitology Pre Clinic, Faculty of Medicine University of Indonesia- Cipto Mangunkusumo Hospital, Jakarta, Indonesia
- <sup>7</sup> Faculty of Psycholoy, Diponegoro University, Semarang, Indonesia
- <sup>8</sup> Industrial Engineering Faculty. Bandung Institute of Technology. Bandung, Indonesia
- Department of Community Medicine Pre Clinic, Faculty of Medicine University of Indonesia- Cipto Mangunkusumo Hospital, Jakarta, Indonesia.
- <sup>10</sup>Medical Services Department, Columbia Asia Semarang Hospital., Semarang, Indonesia

Background: Healthcare workers are vulnerable to stress and burnout which can effect Hypothalamus-Hypophysis Axis (HHA) pathway. This pathway can affect psychological, neurological, immunological and endocrine aspects. These aspects can be evaluate using Maslach Burnout Inventory Human Services Survey (MBI-HSS), a heart rate variability tool, laboratory tests using salivary Immunoglobulin-A (slg-A), β-endorphins and salivary cortisol (SC) levels.

**Purpose:** The aim of this study was to describe the neurological, immunological, and endocrine aspects of healthcare workers without burnout syndrome.

Methods: A quantitative descriptive study was conducted to describe neurological, immunological, and endocrine aspects of healthcare workers without burnout syndrome. Purposive sampling was used and 31 participants were selected.

Findings: Sixty-two participants took the MBI-HSS, and 31 participants without burnout was selected. From 31 participants, there were 29 nurses, with average age were 28 years old. About 93.5% participants were female, 80.6% worked at emergency department, and 83.8% had under 5 years working experience. From HRV test results, there were 14 participants were within normal range (50-100 ms). The average of β-endorphin serum levels are 477.20 pg/ml. Around 61% participants showed normal SC level and 39% showed low SC levels (mean 6.22 ng/ml). Around 90.3% showed normal slg-A and 9.7% high slg-A levels (mean 509.8 μg/ml).

Conclusions: From this study, healthcare workers without burnout syndrome showed normal levels of HRV, slg-A,  $\beta$ -endorphin, and SC levels as a representative of neurological, immunological, and endocrine aspects. Therefore further study need to be conducted to determine the impact of burnout syndrome on these aspects.

**Keywords:** healthcare workers, burnout syndrome, heart rate variability, beta endorphin, salivary cortisol, salivary immunoglobulin A

| No. | Characteristics                  | Results  |
|-----|----------------------------------|--|
| 1   | Gender                           | Male 6.4% (2)<br>Female 93.6% (29)   |
| 2   | Job                              | Nurses 93.6% (29)<br>Doctors 6.4% (2)  |
| 3   | Age                              | Range from 21 -37 years old<br>Median 28   |
| 4   | Working Experience               | Under 5 years 83.8% (26)<br>Above 5 years 16.2% (5)  |
| 5   | HRV SDNN                         | Average 50.26 ms<br><50 ms 51.6% (16)<br>Between 50-100 ms 45.2% (14)<br>>100 ms 3.2% (1)          |
| 6   | Beta-endorphin                   | Average 477.194<br>Highest value 1012<br>Lowest value 175  |
| 7   | Salivary cortisol (SC)           | Low (<5.0 ng/ml): 38.7% (12)<br>Normal 5.0 - 21.6 ng/ml: 61.3% (19)<br>High >21.6 ng/ml: 0         |
| 8   | Salivary Immunoglobulin-A (sIgA) | Low (<93.2 ug/ml): 0<br>Normal (93.2 - 974.03 ug/ml): 90.3% (28)<br>High (>974.03 ug/ml): 9.7% (3) |

**Table 1.** Demographics characters and Laboratory Results.

### [Abstract:2871]

### YOU CAN'T ALWAYS CURE

Isabel Barroso Pozo, <u>Marta Valdés De Torres</u>, Israel Sevilla Moreno, María José Jiménez García, Gloria Pérez Vázquez

Department of Internal Medicine, Hospital Universitario de Jerez, Servicio Andaluz de Salud, Jerez de la Frontera, Spain

65-year-old male, with locally advanced sigmoid adenocarcinoma with invasion of the left ureter and duodenum, lymph node involvement and peritoneal carcinomatosis, receiving neoadjuvant and adjuvant chemotherapy and sigmoidectomy and terminal colostomy. He went to the Emergency Department due nausea and poor oral tolerance. The examination revealed a 20 cm mass in the left abdomen. In laboratory tests, creatinine 1.3 mg/dL, sodium 127 mEq/L, C-reactive protein 94.2 mg/L and 25030 leukocytes/ μL and 24180 neutrophils/μL. Admitted in Palliative Care Unit, and he begins with support measures (absolute diet, nasogastric tube, hydration, antiemetics and gastrografin), reestablishing transit, and to undergo rehabilitation, improving physically.

The causes of malignant intestinal obstruction may or may not be oncological. The average onset is 61 years. The symptoms usually consist of nausea, vomiting, colicky and/or continuous pain and lack of elimination of gas and faeces.

Discussion and learning points. In malignant intestinal obstruction cases we can opt for surgery, stents, conservative measures, palliative medication and parenteral nutrition and hydration, but its recurrence is frequent. Besides, physiotherapy and rehabilitative treatment reduce short-term morbidity and mortality.

Keywords: intestinal, obstruction, rehabilitation

### [Abstract:3009]

### A CASE OF UNTREATED BREAST CANCER LIVING ALONE

Ozlem Yilmaz<sup>1</sup>, Hanife Usta Atmaca<sup>2</sup>

- <sup>1</sup> Istanbul Training and Research Hospital Department of Internal Medicine Division of Geriatrics, Istanbul, Turkey
- <sup>2</sup> Istanbul Training and Research Hospital Department of Internal Medicine, Istanbul, Turkey

Breast cancer is a common malignancy in women worldwide, accounting for approximately 25% of all female cancers. Despite advances in diagnosis and treatment, some patients may refuse treatment or be unable to access follow-up care. This case report presents an 80-year-old female patient with a history of invasive ductal breast cancer who was found to have extensive metastases and was admitted to palliative care due to bleeding from the tumour.

An 80-year-old female patient with a history of invasive ductal breast cancer diagnosed 17 years ago. The patient lives alone and does not have social support, which has prevented her from attending hospital controls for many years. The patient was brought to the emergency department by her neighbours because of bleeding from a giant mass in her left breast. On physical examination and thorax CT, a heterogeneous tumour with a diameter of approximately 20 cm, including widespread cystic-necrotic areas, was detected on the left anterior chest wall. The patient had extensive metastases in the lung and liver on imaging. Biopsy of the skin of the left chest anterior wall was found to be compatible with invasive ductal breast cancer. Interventional radiology for tumour bleeding control could not be performed due to the presence of diffuse collateral. RT was tried, but due to increased bleeding from the tumour tissue, the patient was discussed in the oncology council and was admitted to the palliative care service for supportive treatment.

Keywords: breast cancer, untreated, palliative care



**Figure 1.** Giant mass in the breast of a patient with untreated breast cancer.