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Short Communication

Palliative care in a COVID-19 Internal Medicine ward: A preliminary report



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ARTICLE INFO

Article history:

Received 22 October 2020

Received in revised form 10 February 2021

Accepted 11 February 2021

Keywords:

COVID-19

SARS-CoV-2

Palliative care

ABSTRACT

Background: in the current pandemic emergency, increased attention has given to treating symptoms that cause suffering in patients with COVID-19. This study aims to describe the role of palliative care in the management of these patients.

Methods: palliative consultation was requested by the staff as per protocol. In brief, the criteria for referring patients to a palliative care physician or to undergo palliative care were left to the discretion of the physician in charge. We recorded data regarding age, gender, length of stay, type of discharge (dead or alive, and transfer to long-term or hospice facilities).

Results: Between March 18 to May 8, 2020, 412 patients with COVID-19 were admitted to the Internal Medicine wards of Magenta Hospital, Italy. The palliative care physician was directly involved in 105 cases (25.5%) and performed 236 consultations. Of the 105 patients who received palliative care counselling, 66 (63%) died. The average number of days in care was 2.26 days. The principal reason for counseling was controlling symptoms (54%) and 12% deal with the end of life management. The prevalent symptom, among those which led to the counseling, was restlessness/agitation (41%), followed by emotional issues (26%) such as anxiety, fear, and demoralization. In only 20% of cases, dyspnoea was the reason for symptomatic treatment.

Conclusions: A large number of hospitalized Covid-19 patients are at high risk of clinical deterioration and death. This leads to the opportunity to integrate a palliative physician into the staff, who treat these patients. There is an urgent need for protocol standardization and formal trials to verify the effectiveness of this approach.

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Introduction

As of February 2020, the pandemic of Coronavirus-19 disease (Covid-19) in Italy, and particularly in the region of Lombardy, has created the necessity for supporting clinicians in decision making based on the limited data available in the literature (Grasselli et al., 2020). In the current pandemic emergency, increased attention has been given to treating symptoms that cause suffering; the role of palliative care in managing patients with Covid-19 is therefore of great importance (Radbruch et al. 2020).

Relevant studies (Zhou et al., 2020, Price-Haywood et al., 2020, Wang et al., 2020) have described an increased mortality rate in elderly patients who have pre-existing comorbidities. Moreover, patients with poor prognosis undergo a phase lasting for hours or days with severe symptoms, such as dyspnea requiring mechanical ventilation (either invasive or non-invasive). The vast majority of these patients usually require a palliative approach (Maglio et al., 2020).

Due to the shortage of intensive care beds and ventilators, physicians are responsible for evaluating the clinical aspects related to prognosis (symptoms, blood chemistry, gas analysis, and imaging), as well as the age and the presence of comorbidities, for defining the degree of appropriate therapeutic intensity (Vergano et al., 2020). While this task has caused considerable distress for clinicians involved in difficult decisions, such an evaluation

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protects patients from treatments that do not lead to substantial benefits, helps identify those who need a palliative approach only, and promotes rational and ethical use of health care resources.

The knowledge of meaningful, although preliminary, palliative care experiences in patients with COVID-19 is precious, considering the scarce available literature.

Methods

This study's setting was a ward of Internal Medicine (Department of Internal Medicine, Magenta Hospital, Magenta, Milan, Lombardy, Italy) dedicated to symptomatic Covid-19 patients. The diagnosis of Covid-19 was ascertained following accepted clinical and laboratory criteria (Wu et al., 2020). Asymptomatic Sars-CoV-2 carriers and those requiring airways intubation and/or intensive care were not included.

As recommended by The Italian Society of Palliative Care (Società Italiana di Cure Palliative, [SICP]), and the Italian Society of Anesthesia, Analgesia, Resuscitation and Intensive Care (Società Italiana di Anestesia, Analgesia, Rianimazione e Terapia Intensiva [SIAARTI]) (Piccinni et al., 2020), a palliative care physician (PCP) from the Abbiategrasso Hospice (Abbiategrasso, Milan, Lombardy, Italy) has been included on every shift in the Internal Medicine staff caring for Covid-19 patients in the Magenta Hospital. Both facilities are located in Lombardy in an area of Italy severely affected by the pandemic. Starting from the 18th of March, 2020, all patients fulfilling the criteria for symptomatic Covid-19 and admitted to the Internal Medicine wards of Magenta Hospital were also evaluated by the PCP.

The work of the PCP focused on a daily presence, at first as more of an observer and then gradually more proactively, and defined shared operational procedures in the following areas:

- defining the criteria for identifying a Covid-19 patient who should start palliative treatment;
- sharing the decision-making process with hospital physicians (intensivist and internist)
- managing symptoms such as anxiety and stress regarding an intolerance to respiratory devices;
- administering deep continuous palliative sedation at the end of life;
- choosing drugs and how to administer them;
- reporting to and communicating with patients and family members;
- protecting the self-determination of the patient.

The treatment protocols were left to the discretion of the physician in charge. Palliative consultation was also requested by the staff as per protocol. In brief, the criteria for referring patients to a palliative care physician or to undergo palliative care were:

- cases clinically classified as severe and critical that cannot undergo intensive care treatment because they have been judged inappropriate or excessive,
- patients symptomatic for dyspnoea, psycho-motor agitation/restlessness, pain, insomnia, anxiety/panic stress,
- a state of agony/end of life,
- patients who are intolerant to C-PAP, in particular, to a helmet (used in most cases) or to the high levels of oxygen therapy with reservoir, and therefore the need to increase compliance to these treatments,
- patients who, regardless of treatments, do not respond to etiological treatment and worsen from the clinical point of view (respiratory, state of consciousness), blood chemistry (multi-organ failure), and blood gas analysis, and
- patients who decide not to begin or to suspend intensive care.

Table 1
Characteristics of the enrolled population.

Characteristics	N = 412
Median age (years)	69
Male – n. (%)	261 (63.4%)
Female – n. (%)	151 (36.6%)
Nursing homes – n. (%)	19 (4.6%)
Death – n. (%)	96 (23.3%)
Median hospital stay – days	12
Patients in PC – n. (%)	105 (25.5%)
Death in PC – n. (%)	66 (63%)
Average days in PC	2.26

Abbreviations: PC, palliative care.

We recorded data regarding age, gender, length of stay, type of discharge (dead or alive, and transfer to long-term or hospice facilities).

Results

From the 18th of March to the 8th of May, 2020, 412 patients were admitted to the Internal Medicine wards of Magenta Hospital for symptomatic COVID-19. Of the 412 patients enrolled, 261 (63.4%) were male, and 151 (36.6%) were female; the mean age was 69. Of these, 19 (4.6%) came from nursing homes. 96 patients (23.3%) died in the hospital. For patients discharged alive or transferred to other facilities, the median hospital stay was twelve days. The PCP was directly involved in 105 cases (25.5%) and performed 236 consultations. Of the 105 patients who received palliative care counseling, 66 (63%) died. The average number of days in care was 2.26 days (Table 1).

Twelve of the 19 patients coming from nursing homes (62%) died after an average of three days from the time of admission; three (16%) were transferred to hospice, and four (22%) came back to the nursing facilities.

The principal reasons for counseling were controlling symptoms (54%) and dealing with end-of-life management (12%). Among those that led to counseling, the prevalent symptom was restlessness/agitation (41%), followed by emotional issues (26%) such as anxiety, fear, and demoralization. In only 20% of cases, dyspnoea was the reason for symptomatic treatment, and in 13% of cases, counseling was due to less frequent symptoms such as myalgia/arthritis and pain.

Pharmacological treatments most frequently used to deal with symptoms are shown in Table 2.

The PCP was also heavily involved in communication and reporting to family members, who were not allowed to see their loved ones.

Discussion

We report a preliminary experience identifying Covid-19 patients requiring palliative care and how this was accomplished in an Internal Medicine ward in Italy during the first wave of the pandemic Sars-CoV-2 infection. When all of the factors available for triage are considered (prognosis, age, medical history, clinical condition before infection, and severity of the clinical situation at the time of hospital admission), it is necessary to establish a transition of objectives, identifying the final treatment to follow and to reduce or eliminate invasiveness in favor of comfort (Janssen et al., 2020). This could lead to and consolidate the belief that aggressive treatments are useless since the patient will, in any case, die. What is then needed is to modify treatments, suspend specific therapies (above all antiviral, antibiotic, and anti-

Table 2
Pharmacological treatments most frequently used to deal with symptoms.

Symptoms/conditions	Therapy
Psycho-motor restlessness/agitation	Haloperidol, midazolam
Anxiety/panic due to non-invasive ventilation	Hydroxyzine chlorhydrate, diazepam, midazolam
Dyspnea	Opioids, benzodiazepines

thrombotic) and inappropriate diagnostic procedures (i.e., strict monitoring of blood tests and gas analyses). It is, therefore, necessary to pay particular attention to the evaluation and the management of not only physical but also psychological symptoms (i.e., stress, anxiety, delirium, and depression) in order to carry out the overall care of the patient and his family (Maglio et al., 2020).

In our COVID-19 Internal Medicine wards, a multidisciplinary team of intensivists, internists, pulmonologists, infectious disease specialists, and palliative care physicians discussed daily the strategies for personalizing critical patients' treatment.

In our experience, one-fourth of the patients were managed by the PCP for at least two days. Mortality in these patients was very high (two-thirds). We believe that such high numbers support the decision to include a PCP in the staff who takes care of the severely sick patient.

Some peculiar features of this experience were:

the characteristic of the pathology in terms of its seriousness and rapid progression, which leads to “emergency palliative care”; the role of the PCP as part of the decision-making team and not just as an end-of-life specialist. A similar model used in simultaneous care is a flexible, dynamic, and integrated approach.

Conclusions

A large number of hospitalized Covid-19 patients are at high risk of clinical deterioration and death. This leads to the opportunity to integrate a palliative physician into the staff who treat these patients. There is an urgent need for protocol standardization and formal trials to verify the effectiveness of this approach.

Funding

None declared.

Ethical approval

The local institutional review board approved this study and waived the need for informed consent.

Authors' contribution

NM: participated in the study design and coordination, collated and analyzed the data, and drafted the manuscript; CF, LM, IE, GR: participated in the study design and data collection; AM, MC: participated in the study design and helped draft the manuscript.

Conflict of interest

The authors state that they have no conflicts of interest.

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