Symptom management of COVID-19 positive patients in an acute NHS trust: a specialist palliative care team perspective

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Introduction

Despite a 33% mortality rate for hospital admissions with COVID-19, data around end-of-life care needs in the context of the virus remain lacking. We present a study of 89 COVID-19 hospital patients who received specialist palliative care team (SPC) input. This study delivers a novel understanding of the symptom needs of those dying from COVID-19, with recommendations for generalist management of these patients.

Materials and methods

The electronic patient records of 89 COVID-19 positive patients with SPC involvement in an acute trust during a
A 1-month period (20 March 2020 – 21 April 2020) were reviewed retrospectively. Patients were managed at ward level, some with non-invasive ventilation (NIV); intensive care unit patients were excluded. Patients were followed up at the end of April. Data were analysed using MS Excel.

Results and discussion

Eighty-four per cent (n=75) of COVID-19 positive patients had died at follow-up (median SPC involvement time of 2 days (interquartile range (IQR) 1–5)).

The most frequent symptoms in patients dying from COVID-19 were breathlessness (92%; n=69), pyrexia (44%; n=33) and agitation (45%; n=34). COVID-19 positive patients commonly required symptom control medications (84%; n=63) and continuous subcutaneous infusions (CSCIs; 69%; n=52), reinforcing our clinical experience of a highly symptomatic dying phase. Symptoms and trajectories were too unstable for transdermal medication use.

Symptoms were managed with low doses of opioid and benzodiazepine medications (Fig 1), with a median CSCI morphine equivalent dose of 15 mg (range 5–60; IQR 10–20; n=51) and median CSCI midazolam dose of 10 mg (range 5–60; IQR 10–20; n=40).

Patients' high symptom burden and rapidity of deterioration did not always allow typical practice of using as needed (PRN) medications for a 24-hour period prior to CSCI initiation. The early use of CSCIs was therefore essential to ensure symptom control, and access to medications given staffing pressures. This was reflected in the low median amounts of subcutaneous morphine and midazolam required in the 24 hours preceding a CSCI (morphine median 2.75 mg (IQR 2.5–7.5) and midazolam 2.5 mg (IQR 2.5–5)). A high percentage of alfentanil use in CSCIs (37%; n=19) was observed, possibly reflecting micro-embolic–driven renal impairment in COVID-19. Only 23% (n=17) of patients required opioid dose escalation and 17% (n=12) required midazolam dose escalation, again reinforcing the ability to manage symptoms with low doses of medications. Few patients required glycopyrronium (n=15) and antiemetics (n=5) via a CSCI.

Thirty-three per cent (n=4) of COVID-19 positive patients who survived required symptom control medication, with 17% (n=2) requiring CSCIs; our experience was that some patients required CSCIs to enable them to tolerate medical management, such as NIV.

Conclusion

Those dying from COVID-19 often have a rapid deterioration and symptomatic dying phase, making early symptom control paramount. Symptom control can be achieved with traditional drugs often at low doses, though with earlier use of CSCIs. Effective symptom management may also improve response to active medical treatments, such as tolerance of NIV. Education and reassurance for generalists (Fig 2) in the early use of opioids and benzodiazepines is essential to managing symptoms of patients with COVID-19.

Conflicts of interest

None declared.

References