UPMC PALLIATIVE AND SUPPORTIVE INSTITUTE

PALLIATIVE CARE PHARMACY PHAST PHACT

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Palliative Care Pharmacy Team:

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If you have a topic you would like the pharmacy team to answer, please send your suggestions to: pruskowskija@upmc.edu

JOURNAL CLUB:

Clinical Characteristics of Coronavirus Disease 2019 in China

Background:

The COVID-19 pandemic has infiltrated every section of our lives.

Importance:

Palliative care providers have, and will continue to, care for COVID-19 positive patients. Therefore, being aware of the published literature is important.

The Literature:

- <u>N Engl J Med. 2020;NEJMoa2002032.</u> doi:10.1056/NEJMoa2002032

Clinical Characteristics of Coronavirus Disease 2019 in China

- <u>Methods</u>: Retrospective review of 1099 patients with laboratory-confirmed Covid-19 from 552 hospitals in 30 provinces, autonomous regions, and municipalities in China through January 29, 2020. The primary composite end point was admission to an intensive care unit (ICU), the use of mechanical ventilation, or death
- <u>Results:</u> The median age of the patients was 47 years; 41.9% of the patients were female
 - The primary composite end point occurred in 67 patients (6.1%), including 5.0% who were admitted to the ICU, 2.3% who underwent invasive mechanical ventilation, and 1.4% who died
 - Only 1.9% of the patients had a history of direct contact with wildlife
 - Among nonresidents of Wuhan, 72.3% had contact with residents of Wuhan, including 31.3% who had visited the city
 - The most common symptoms were fever (43.8% on admission and 88.7% during hospitalization) and cough (67.8%). Diarrhea was uncommon (3.8%)



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- The median incubation period was 4 days (interquartile range, 2 to 7)
- On admission, ground-glass opacity was the most common radiologic finding on chest computed tomography (CT) (56.4%)
- No radiographic or CT abnormality was found in 157 of 877 patients (17.9%) with nonsevere disease and in 5 of 173 patients (2.9%) with severe disease
- Lymphocytopenia was present in 83.2% of the patients on admission
- <u>Conclusion:</u> "During the first 2 months of the current outbreak, Covid-19 spread rapidly throughout China and caused varying degrees of illness. Patients often presented without fever, and many did not have abnormal radiologic findings."

So... What does this all mean Jenn?

- While this study provides a lot of great information, there have been a few other studies exploring the clinical characteristics of COVID as well:
 - Lancet. 2020;395(10223):507–513.
 Epidemiological and Clinical Characteristics of 99 Cases of 2019 Novel Coronavirus Pneumonia in Wuhan, China: A Descriptive Study
 - <u>Curr Med Sci. 2020;10.1007/s11596-020-2172-6.</u> Clinical Characteristics of Children With Coronavirus Disease 2019 in Hubei, China
- Remember the above study included confirmed hospitalized patients and outpatients, and included only approximately 14.2% of the total COVID-19 positive cases at that time in China
- Here were the surprising points for me from the above study:
 - 1. While 86.2% of CT scans revealed abnormal results, no abnormalities were found in 17.9% of patients (2.9% of patients with severe disease)
 - 2. Fever and cough were the dominant symptoms and GI symptom were uncommon, which suggests a difference in viral tropism than previous virus (SARS or seasonal influenza). However, the absence of fever is more frequent than previous viruses, so it is possible afebrile asymptomatic patients may be missed
 - 3. The majority of patients received IV Abx therapy (58%), and fewer received oseltamivir therapy (35.8%) and systemic glucocorticoids (18.6%)
- I look forward to more data regarding the effectiveness of pharmacological agents for COVID-19 and passing them along to you

CLINICAL PEARL:

According to a recent NEJM study, many patients with COVID-19 often presented without fever and/or abnormal radiologic findings.