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Letter to the Editor: Impact of COVID-19 Outbreak on Acute Low Back Pain

Letter:

We read with interest the article recently published in WORLD NEUROSURGERY by Agosti et al.[1] on the management of neurosurgical emergencies during the 2019 novel coronavirus disease (COVID-19) pandemic. We would like to add our contribution from one of the regions of the world most affected by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on how the pandemic has influenced the number of visits for low back pain (LBP) and to provide food for thought for a reorganization of LBP management in the post–COVID-19 era.

Since February 20, 2020, when the first person-to-person transmission of SARS-CoV-2 was reported in Italy, the COVID-19 outbreak has reached pandemic status. The Italian health system had to reorganize entire hospitals to care for an unprecedented number of patients who needed urgent treatments at the same time; on March 8, 2020, hubs were identified for specific urgent or tumoral pathologies.[2] What about patients who have do not have acute respiratory illness or do not have life-threatening or tumoral conditions? What about patients with other pathologies, such as acute LBP, who usually present to the emergency department (ED)?

LBP has an incidence of about 5% a year, and up to 90% of the population experiences LBP at least once in their lives; it accounts for about 3% of ED visits in the United States.[3] Although the vast majority (85%–90%) of patients with acute LBP have symptoms that tend to regress within 4–6 weeks,[4] in a few patients the cause of pain is a serious pathology; the prevalence of cancer is about 1%, and the prevalence of vertebral fracture is about 4%.[5] The importance of psychological status on pain perception and reports by patients is clear, but few reports have studied the impact of emergency settings (i.e., natural disasters, wars, pandemics) on pain management.[6]

We collected data from 4 hospitals in Milan on ED and on outpatient department (OD) visits for acute LBP for the period from March 8, 2020, April 8, 2020, and for the same period in 2019. In this 1-month period in 2020, 103 patients presented with acute LBP, 73 in the ED and 30 in the OD. In the ED, 45 patients presented with LBP, 22 presented with sciatica, 5 presented with fractures (porosis), and 1 presented with a tumor (prostate cancer). In the OD, 12 patients presented with LBP, 15 presented with sciatica, 2 presented with fractures (porosis), and 1 presented with a tumor (breast cancer).

During the same period in 2019, 802 patients presented with acute LBP, 647 in the ED and 155 in the OD. In the ED, 352 patients presented with LBP, 245 presented with sciatica, 47 presented with fractures (8 traumatic and 39 porosis), and 3 presented with tumors (2 breast cancers, 1 prostate cancer). In the OD, 52 patients presented with LBP, 89 presented with sciatica, 8 presented with fractures (porosis), and 6 presented with tumors (2 breast cancers, 3 prostate cancers, and 1 colorectal cancer).

The data we collected showed a clear reduction (−87.2%) in patients presenting with acute LBP. The decrease in visits might reflect the reduction of traumatic cases owing to the lockdown the movement of people, but in most cases this is probably related to the fear of being exposed to SARS-CoV-2 in a hospital environment. Despite the scarcity of available resources owing to the pandemic, the vast majority of patients with acute LBP would have had the opportunity to access hospitals, but they decided not to.

In a normal situation, how many patients that we see in the ED or OD for acute LBP really need an urgent hospital evaluation? The COVID-19 outbreak is changing our everyday life, but we could exploit this exceptional moment for a reorganization of our emergency system. We will need to strengthen the provision of local medical care by training and by providing guidelines and diagnostic pathways for general practitioners to identify the patients (with tumors, unstable fractures, or neurologic deficits) who need evaluation in a hospital setting.[5] Furthermore, we will have to deal with COVID-19 in the months to come, and it will be imperative to implement tools, such as telemedicine, that allow adequate evaluations and treatments while maintaining the necessary social distancing.[7]

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