

Current Management Practices for Patients Presenting with Low Back Pain to a Large Emergency Department in Canada

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Introduction

Low back pain (LBP) is one of the leading causes of disability. Presentations to the emergency department (ED) are common and consume significant healthcare resources. However, treatment of patients with LBP is variable and physician dependent. Our study objective was to describe the demographic and clinical characteristics of patients presenting to the ED with LBP, the diagnostic strategies employed by ED physicians, and the subsequent management.

Methods

We conducted a retrospective study using clinical and electronic health data at the Charles V. Keating Emergency and Trauma Centre. We selected a simple random sample of 325 adult participants who presented to the ED with non-urgent LBP over a six-year period. Data for all participants, including demographic characteristics, diagnostic testing, and interventions received, was retrieved from the Emergency Department Information System database and from patient charts.

Results

Participants had a median age of 43 years and 55% were female. The majority (92.9%) were acute presentations of LBP (<4 weeks duration), with an assigned Canadian Triage Acuity Scale score of 3-4 (92.4%). A range of pain intensity scores were reported, mostly without associated neurological symptoms (81%) or sciatica (68%). Laboratory investigations were conducted on 22.5% of participants and 30% received an imaging study. Medications were delivered to 59.4% of participants during their stay in the ED. Ibuprofen (28.3%), hydromorphone (24.9%), and acetaminophen (21.5%) were the most frequent medications delivered. Almost all (94%) had a record of having a primary care provider and referrals back to the participant's family physician were recorded in 41.2% of encounters.

Conclusion

We presented a complete description of patient characteristics, LBP descriptors, and health service use for a random sample of non-urgent LBP patients presenting to the ED. This has allowed for a better understanding of patients who seek care in the ED for their non-urgent LBP.