Prognosis of Patients Presenting to the Emergency Department with Low Back Pain

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Introduction

Low back pain is very common, and is associated with significant impact on functional quality of life. Most low back pain is considered mechanical (85%), that is, it is not caused by a specific spinal disease such as neoplasm, infection, or fracture. Many patients with low back pain visit the emergency department (ED) for treatment, but there is a paucity of research specific to this environment. The aim of this project is to understand patient outcomes after presenting to the ED with low back pain, and to identify prognostic factors associated with these outcomes.

Methods

This was a prospective, single centre, cohort study of patients with a chief complaint of low back pain, triaged to a Canadian Triage and Acuity Scale level of 3-5. Target recruitment was 312 subjects, to allow statistical power to estimate overall prognosis (clinically important improvement), and multivariate analysis of 5 independent variables.

Eligible patients were identified and enrolled from triage. A research team member was present during daytime hours to facilitate enrollment, however a separate protocol enabled patients to be enrolled when a research team member was not on site. Consenting patients completed a written questionnaire in the ED and were followed up at 3 months via telephone or electronic survey. Retrospectively, patients' ED information system (EDIS) data and ED chart were queried for patient visit information. Anonymized information from non-consenting patients was obtained from EDIS for comparison of baseline characteristics.

Results

From June 22 to November 16, 2016, 958 adults presented to the ED with a chief complaint of back pain. In total, 179 patients completed the baseline questionnaire, and 80 completed the follow up questionnaire. Anonymized baseline information was obtained for 780 non-consenting patients for comparison.

Conclusion

Final results and conclusions are in progress and will be included in the oral presentation.