Influence of Emergency Department Visits on the Behaviour of Hypertensive Patients

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Objective: Hypertensive urgencies are a common problem in emergency departments. Causes of hypertensive urgencies are insufficient medication, incorrect ingestion of drugs, and lifestyle. The aim of this study was to evaluate if a stay in an emergency department can change the behavior of hypertensive patients with regard to blood pressure control, medication intake, and lifestyle.

Methods: In a retrospective study, all patients who presented with hypertensive urgencies during the last three months. Three months later, each patient received a questionnaire with the following topics: changes in therapy, frequency of blood pressure (BP) control, and behavior.

Results: Seventy-three patients (37 male, 36 female; age 56-13 years) received the questionnaire. Within three weeks, 30 (41%) patients (17 male, 15 female; age 58-15 years) returned completed questionnaires.

<table>
<thead>
<tr>
<th></th>
<th>Yes (n)</th>
<th>No (n)</th>
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<tbody>
<tr>
<td>Physician visit</td>
<td>28 (93)</td>
<td>2 (0.7)</td>
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<tr>
<td>Therapy changes</td>
<td>27 (90)</td>
<td>1 (1)</td>
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<tr>
<td>Frequency of BP control</td>
<td>17 (57)</td>
<td>13 (43)</td>
</tr>
<tr>
<td>Behavior changes (smoking, stress, weight)</td>
<td>20 (66)</td>
<td>11 (34)</td>
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Conclusion: The patients returning the questionnaire seemed to be a positive, selected group of patients. Most of them visited a physician after this event and improved their medication intake. Changes in behavior and frequency of blood-pressure control were rare. It is assumed that long-term effects on behavior of hypertensive patients cannot be established. In conclusion, an enforced information about risks and consequences of hypertension seemed to be necessary to achieve long-term effects on behavior of hypertensive patients after a visit in an emergency department.

Standing Orders: Does This System Decrease the Prehospital Care Error Rate?

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Objective: The aim of this study was to compare the error rates of physician medical commanders and paramedics before and after implementation of a standing-orders protocol system for patient care by paramedics.

Design: Physician review of prehospital trip sheet conducted prospectively as part of an ongoing quality assurance (QA) program.

Setting: An urban paramedic service in the northeastern United States.

Participants: A total of 2,001 advanced life support (ALS) runs from the start date 1 April 1991 of the protocol system through 31 January 1992 were reviewed as part of the QA program.

Interventions: Errors in patient care (failure to administer an indicated treatment or medication or performing inappropriate or excessive treatment) by medical-command physicians and by paramedics were recorded. The errors were compared to the medical-command errors determined from a previous study encompassing transports from September 1988 through December 1990, at which time paramedics were required to obtain medical command for most treatments.

Results: Medical command errors decreased from 4.4% to 1.2% of runs after the standing-orders system was adopted. Paramedic error rates remained at <0.5% in both systems. Mean paramedic on-scene time interval decreased by 68 seconds with the standing-orders system.

Conclusions: Use of standing orders to direct initial patient care by paramedics resulted in a significant decrease in the treatment error rate by medical-command physicians, no change in the low paramedic error rate, and slightly decreased on-scene times. Use of standing orders may improve efficiency of prehospital care without compromising quality of patient care.