

THE GERIATRIC EMERGENCY DEPARTMENT

To the Editor: We read with great interest the paper by Hwang et al.¹ and congratulate them on the detailed analysis of the challenges facing emergency departments (EDs) caring for older patients. We agree that a geriatric ED (GED) is an important service in every hospital caring for old people. We wish to inform the authors and the readers that a GED has been operating in the Hadassah-Hebrew University Medical Center in Mount Scopus, Jerusalem, for the past decade.

The GED is a separate unit within the emergency medical services of the hospital that is open 24 hours a day 7 days a week and admits every patient aged 70 and older.

Geriatricians, a resident, an attending physician, a geriatric nurse, and a social worker staff the department. Consultative services from all disciplines in the hospital are available, including physical, occupational, and speech therapy.

Routine evaluation of all patients includes, in addition to medical history and physical examination, functional (activities of daily living (ADLs), instrumental ADLs) and cognitive (Mini-Mental State Examination) evaluations, fall risk assessment, depression (Geriatric Depression Scale), and social evaluation.

The GED has direct access to continued care services, including acute and subacute care departments, home hospital, geriatric rehabilitation departments, skilled nursing departments, and a palliative care center, enabling patients to receive the optimal and most appropriate care that they deserve.

To assess the contribution of the GED to the institution, 100 consecutive patients presenting to the GED at the Hadassah-Mount Scopus campus were compared with 100 consecutive patients presenting to the ED at the Hadassah-Ein Kerem campus (where no GED exists). All patients were aged 70 and older. Subjects were followed prospectively for 6 months post-ED discharge and a comparison of the two departments was performed for satisfaction with ED treatment, rate of independence in ADLs, and readmission rate.

Results showed

- significantly higher satisfaction with ED treatment in the GED ($P = .03$),
- a higher rate of postdischarge independence in ADLs in the GED, although not statistically significant (15.9% vs 13.6%, $P = .72$),
- a significantly lower readmission rate in the GED (18% vs 30%, $P = .047$).

We propose that the GED is designed to address the challenges of caring for older patients and may succeed in reducing disability and readmissions in this unique population. GED should be an integral part of every general hospital's emergency services.

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REFERENCE

1. Hwang U, Morrison S. The geriatric emergency department. *J Am Geriatr Soc* 2007;55:1873-1876.

CLINICAL PROFILE OF PATIENTS WITH SYMPTOMATIC GLYCYRRHIZIN-INDUCED HYPOKALEMIA

To the Editor: Conn et al. were the first to report licorice-induced hypokalemia in 1968.¹ This disorder is also called pseudoaldosteronism² and is sometimes found in Japan because of the widespread use of glycyrrhizin-containing medications.^{3,4} We evaluated the clinical profiles of patients with symptomatic glycyrrhizin-induced hypokalemia.

The study included 14 patients with symptomatic hypokalemia who had been treated with medications containing glycyrrhizin. Laboratory investigations were performed routinely on admission; hypokalemia was defined as serum potassium levels less than 3.5 mmol/L. Electrocardiograms (ECGs) were routinely obtained; ST-segment depression was defined as greater than 0.5 mm in limb leads and greater than 1.0 mm in precordial leads. Distinct U waves were defined as greater than 0.2 mV.

Data were expressed as means \pm standard deviations. Statistical analysis was performed using paired and unpaired Student *t*-tests for continuous variables. Differences were considered significant if $P < .05$.

Patient characteristics were listed in the order of potassium concentration (Table 1). There were two men and 12 women, with a mean age of 74 ± 10 . Various primary complaints including syncope, paralysis, and hypertension were noted.⁴⁻⁶ All patients had a history of hypertension, and four patients had a history of diabetes mellitus. Laboratory results showed serum creatinine, 0.7 ± 0.3 mg/dL; sodium, 137.9 ± 8.1 mmol/L; potassium, 2.3 ± 0.5 mmol/L; creatine kinase, 453 ± 638 IU/L; and pH, 7.55 ± 0.06 . Serum creatine kinase was elevated more than 200 IU/L in seven patients (50%). Plasma renin activity and aldosterone concentration measured in 11 patients were suppressed. There was no evidence of adrenal gland masses on computed tomography and ultrasonography of the abdomen. Ten patients (71%) had been taking herbal medicines containing glycyrrhizin, and four (29%) had been taking a glycyrrhizin-containing preparation for chronic hepatitis. Seven patients (50%) had been taking diuretics for hypertension or edema.

ST-segment depression was found in seven patients (50%). It was found more frequently in leads V₄₋₆. There was no significant difference in serum potassium levels

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