

Acute Department Syndrome



In this issue of *Emergency Medicine*, Greg Weingart, MD, and Shравan Kumar, MD, guide readers through the diagnosis, monitoring, and treatment of acute compartment syndrome, a relatively uncommon but devastating injury that may affect an extremity following a long bone fracture, deep vein thrombosis, or rhabdomyolysis from crush injuries or high-intensity exercising. Compartment syndrome occurs when increased pressure within a limited anatomic space compresses the circulation and tissue within that space until function becomes impossible. Even with heightened awareness of the disastrous sequelae, and with very early pressure monitoring of the injured compartment, physicians are at a loss to effectively intervene to prevent the continuing rise in pressure until a fasciotomy is required.

The disastrous consequences of rising pressure in a closed space suggests what can occur in the severely overcrowded EDs that now are common in every city in this country—EDs with too many patients waiting for treatment and inpatient beds.

Pressure on the nation's ED capacity has been steadily increasing for the past three decades. Hospital/ED closings, demand for preadmission testing by managed care and primary care physicians, increasing numbers of documented and undocumented people seeking care, a rapidly aging population with more comorbidities, and increased numbers of patients seeking

care under the Affordable Care Act have not been met with a commensurate increase in ED capacity. Between 1990 and 2010, the country's urban and suburban areas lost one quarter of their hospital EDs (Hsia RY et al. *JAMA*. 2011;305[19]:1978-1985). In that same period, New York City lost 20 hospitals and about 5,000 inpatient beds; after 2010, when the state stopped bailing out financially failing hospitals, four more hospitals closed and were replaced by three freestanding EDs (FSEDs). Though FSEDs may partially fulfill the need for 24/7 emergency care at their former hospital sites, when patients in FSEDs require admission, they must compete with patients in hospital-based EDs for inpatient beds.

Despite the many and varied sources of increasing numbers of patients arriving in EDs, by all accounts this influx in and of itself is not the major driver of ED overcrowding. Trained, competent EPs, supported by skilled and highly motivated RNs, NPs, and PAs, are capable of efficiently managing even frequent surges in patient volume—as long as the “outflow” is not blocked. In many cases, this means having adequate, timely outpatient follow-up available to allow for safe discharge. But overwhelmingly, it means having adequate numbers of inpatient beds.

The discomfort and loss of privacy that patients experience from spending many hours or days on hallway stretchers are bad enough, but eventually patient safety also becomes a con-

cern. With some creative approaches varying by location and circumstances, EPs have generally been able to successfully address the safety issues—so far. For example, many years ago, we began holding in reserve a small portion of our fee-for-service EM revenue available to supplement the hospital-provided base salaries. By frequently monitoring conditions throughout the day, taking into account rate of registration in the ED, day of the week, OR schedules, etc, we were able to decide before noon whether there was a need to offer 4, 6, or 8 evening/night hours at double the hourly sessional rate to the first EPs, PAs, and NPs in our group who responded to the e-mails. The hours worked did not earn these “first responders” any additional “RVU” credits as, for the most part, they were working closely with the inpatient services to monitor and supplement the care of admitted patients waiting in the ED. This arrangement provided an additional level of patient safety with no additional expense to the hospital.

But flexible measures to provide patient comfort and ensure safety cannot solve the inflexible space issue, and instituting harsher regulations and core measures will only increase the pressures on ED staffs. What is required is a serious look at the national model for accruing ED costs, revenues, and third-party reimbursements, and then adjusting the formulas to address the current patient care realities before a “fasciotomy” is required. ■

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