EDITORIAL

Specialists in Medical Emergencies: value for money?

Albert SALAZAR

Medical Director. Hospital Universitari de Bellvitge. L'Hospitalet de Llobregat. Barcelona, Spain.

In this issue of our journal, there appear two original studies of considerable interest, not only for Emergency Department (ED) professionals but also, hopefully, for health care providers and hospital managers. The two studies analyze and report on the activity performed in ED support units. They are mutually complementary, allowing for constructive criticism and reflection on a highly topical issue.

In the first study, Estella et al[1] present their results from a 24-bed ED observation unit (ED-OU) in a second-level hospital. In a random sample of 307 ED-OU patients, the authors describe patient profiles, final destination, criteria for hospitalization and the correlation between diagnosis and hospitalization. The most important findings include a mean age of 63 years, male predominance and related comorbidity in 51% of the cases; 46% were discharged home and another 46% required hospital admission. The main diagnoses were acute myocardial syndrome, pneumonia and heart failure. A relevant finding of the study was high concordance between ED diagnosis and hospital admission, which reached 89.3%.

In the second study, González-Armengol et al[2] report on their 4-year experience in a 16-bed ED short-stay unit in a third-level hospital. The study included a total of 10,942 patients with a mean age of 78.8 years. Notable findings include an OU occupation index of 87%, mean stay 1.91 days and home discharge rate with a care protocol of 86.9%, of which 20% occurred at weekends. Other important findings include a slightly elevated rate (10.9%) of internal transfers, optimal rate of mortality (0.14%) and re-admission (3.7%). This study also highlights the relationship between use of the short-stay unit and other alternatives such as conventional hospital admission or home discharge with a care protocol, as occurred in 12.4% of discharges from the unit to final destination.

Nowadays, there should be no need to debate the need for creating an ED-OU situated in physical spaces adjacent to the ED[3,4]. Patients requiring observation or treatment in the ED have to remain in bays needed for primary attention or they are assigned to other spaces, resulting in great inconvenience for the patients, family companions and the attending health personnel themselves. When the process of deciding on ED patient destination is performed in a reasonably short time of patient stay in the ED, this may be considered as a minor problem. However, when the patient does not require conventional admission to hospital department according to the first evaluation but may benefit from specific treatment during 6-24 hours followed by ambulatory treatment, then the problem becomes considerable; this patient may be occupying a primary attention bay during 24 hours.

The purpose of an ED-OU is to allow these patients to receive specific treatment and, after supervision and re-evaluation within a maximum of 24 hours, it is highly probable they may be discharged home, with increased guarantee of more effective ambulatory treatment. An ED-OU may also facilitate a certain level of attention where particular patients needing more than 6 hours observation, awaiting diagnostic test results for example, can be accommodated with a certain degree of comfort, at the same time freeing an ED bay[5]. Thus, an ED-OU meets four main objectives: 1) to reduce the number of inappropriate hospital admissions of patients with diseases and conditions that only require short periods of observation followed by possible discharge home; 2) to reduce the risk of early discharge in patients with uncertain prognoses, and thus also reduce the number of re-

Correspondence: Albert Salazar. Hospital Universitari de Bellvitge. Feixa Llarga, s/n. 08907 L'Hospitalet de Llobregat. Barcelona, Spain. E-mail: asalazar@bellvitgehospital.cat

Date of receipt: 16-2-2009. **Date of acceptance:** 18-2-2009.

Conflict of interest: None

turn visits to ED; 3) to reduce ED waiting time and stay, since that reduces ED over-crowding; and 4) to serve as a bridge, on occasions, to alternative support units such as the short-stay unit, or home discharge with a care protocol.

The need to relieve ED over-crowding, together with optimizing hospital stay of patients with chronic disease that become acute, were the main reasons for the birth of short-stay units[6,7]. Many of these patients require admission while waiting for their clinical conditions to improve sufficiently to then receive ambulatory treatment. If the usual dynamics of attention are applied in conventional hospital departments, the resulting stay periods are not in accord with clinical improvement, which produces undesired prolonged stay periods and indirectly, difficulty in reducing ED occupation. Short-stay units are an effective resource as an alternative to conventional hospitalization for this type of patient that may benefit from a hospital stay of 24-72 hours[8-11].

For optimal functioning of a short-stay unit, certain principles should be followed; the correct selection of patients, establishing admission criteria, clear diagnoses and prognoses for discharge within 48-72 hours maximum. Thus, the intensity of care procedures to be carried out in the short-stay unit must, a priori, be limited when considering complex complementary tests and duration of treatments.

The more a short-stay unit fulfils the function of a short-term treatment unit, not a diagnostic unit, the more worthwhile it becomes. Nor should it become a pre-admission unit, which distorts its true function and reduces its efficacy[12].

Finally, hierarchic dependency on the ED is the main strength of the short-stay unit. The degree of staff involvement contributes to facilitating its activity and fulfilling one of its main objectives – to relieve over-crowding in the ED.

Given the above considerations, the answer to the title question is obvious.

References

1 Estella A, Pérez-Bello L, Sánchez JI, Toledo MD, Del Aguila D. Actividad asistencial en la unidad de observación de un hospital de 2º nivel. Emergencias 2009;21:95-8.
2 González-Armengol JJ, Fernández C, Martín FJ, González J, López A, Elvira C, et al. Actividad de una unidad de corta estancia en urgencias de un hospital terciario: cuatro años de experiencia. Emergencias 2009;21:87-94.
3 Brillman J, Mathers-Dunbar L, Graff L, Joseph T, Leikin JB, Schultz C, et al. Management of observation units. American College of Emergency Physicians. Ann Emerg Med 1995;25:823-30.
4 Montero FJ, Calderón de la Barca JM, Jiménez L, Berlango A, Pérez I, Férula de Torres L. Situación actual de los Servicios de urgencias hospitalarios en España (y IV): Áreas de Observación. Emergencias 2000;12:259-68.
5 Tomás S, Duaso E, Ferrer JM, Rodríguez M, Porta R, Epelde F. Evaluación del uso apropiado de un área de observación de urgencias mediante el Appropriateness Evaluation Protocol: un análisis de 4.700 casos. An Med Interna (Madrid) 2000;17:229-37.
6 Salazar A, Juan A, Corbella X. Unidades asistenciales de apoyo a urgencias: la unidad de corta estancia de urgencias. Monografías Emergencias 2008;2:9-11.
7 Corbella X, Salazar A, Maiques JM, Juan A. Unidad de corta estancia de urgencias como alternativa a la hospitalización convencional. Medicina Clínica 2002;118:515-6.
8 Juan A, Salazar A, Alvarez A, Perez JR, García L, Corbella X. Effectiveness and safety of an Emergency Department short-stay unit as an alternative to standard inpatient hospitalization. Emerg Med J 2006;23:833-7.
9 McDermott MF, Murphy DG, Zalenski RJ, Rydman RJ, McCarren M, Marder D, et al. A comparison between emergency diagnostic and treatment unit and inpatient care in the management of acute asthma. Archives of Internal Medicine 1997;157:2055-62.
10 Salazar A, Juan A, Ballbé R, Corbella X. Emergency Short-Stay Unit as an effective alternative to in-hospital admission for acute COPD exacerbation. Am J Emerg Med 2007;25:486-7.
11 Juan A, Llopis F, Masuet C, Biosca M, Salazar A, Corbella X. Estudio comparativo de pacientes con agudización de EPOC tratados con moxifloxacino oral frente a otros antibióticos por vía endovenosa en una unidad de corta estancia de urgencias. Emergencias 2007;19:65-9.
12 Gómez C, Guillamont J, Salazar A, Juan A, Novelli A, Corbella X. Evaluación de la satisfacción de los pacientes ingresados en una unidad de corta estancia de urgencias. Emergencias 2005;17:12-6.