ORIGINAL ARTICLE

Community-acquired pneumonia management in a short-stay unit: analysis of safety and efficacy

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Background and objective: Community-acquired pneumonia (CAP) is a highly prevalent disease that often requires hospital admission. We aimed to assess the safety and efficacy of treating CAP in a short-stay unit as an alternative to conventional hospitalization.
Methods: Retrospective comparison of patients admitted to a tertiary care hospital with a diagnosis of CAP between November 2005 and April 2007. We compared outcomes for cases managed in the 2 locations (short-stay unit vs conventional hospital ward), excluding patients who required intensive care. Variables and outcomes analyzed were age, sex, Charlson index, mean weight in the diagnosis-related group, scores on the CURB-65 criteria and the Pneumonia Severity Index (PSI), findings of microbiology, and readmission and mortality rates.
Results: A total of 606 patients were studied; 187 were treated in the short-stay unit and 419 were admitted to the conventional ward. The main significant differences between the 2 groups were mean age (77.3 vs 67.9 years, respectively; *P*<.0001) and mean stay (3.48 vs 7.89 days; *P*<.0001). These differences were also reflected in the comparison between severity subgroups (by PSI). Mortality rates did not differ.
Conclusions: Our experience with the short-stay unit suggests it offers a safe and effective way to manage CAP and leads to a significantly shorter hospital stay in comparison with conventional hospitalization, without increasing readmission and mortality rates. [Emergencias 2011;23:175-182]

Key words: Community-acquired pneumonia. Short-stay unit. Hospital stay, mean duration. Safety. Efficacy.

Introduction

Community-acquired pneumonia (CAP) is a highly prevalent infectious disease with worldwide distribution. The annual rate of incidence in adults varies between 1.62 and 13.4 per 1,000 inhabitants, and hospitalization rate ranges between 22% and 51%[1]. The decision to treat the patient as an outpatient or inpatient is of primary importance for the management and final cost[2]. In addition to clinical judgement, the attending physician may use certain scales as predictors of mortality such as CURB-65[3] or the Pneumonia Severity Index (PSI)[4,5] to identify patients with CAP as candidates for outpatient treatment[6-9].

If outpatient treatment is excluded, the physician must decide on where best to refer such patients: short stay units (SSU), conventional hospitalization (CH) or intensive medicine units (IMU)[9]. In the past 20 years, many Spanish hospitals have established SSU. The main candidates for admission to these units are patients with previously diagnosed chronic disease and current decompensation, and patients with acute disease and high probability of CAP diagnosed in the emergency department (ED) and expected to respond favorably to treatment within 48-72 hours and where the need for intensive care is not expected[10-15].

Regarding the choice of destination for treating CAP in a hospital unit, there are recommendations

based on risk scores. According to these recommendations, patients with PSI risk scores I and II should be treated as outpatients (in the absence of other causes, related with CAP or not, justifying hospital admission). PSI III patients should be treated in observation units or SSU. And PSI IV and V patients should be referred to CH or IMU[9].

Given that the incidence of CAP is higher in the elderly than in young adults[1], implementing these PSI-based recommendations where age weighs heavily on final score, a large number of elderly patients meet the criteria for hospital admission, mostly CH[16,17]. Since prolonged hospital stay can contribute to increased complications it seems necessary to consider SSU as a suitable destination for the treatment of CAP in selected patients without a priori excluding any risk group.

The objective of this study is to describe our experience in treating patients diagnosed with CAP and admitted to a SSU, and assess whether safety measured by readmission rates and mortality is similar to patients with CAP treated in CH.

Method

The study was conducted at the University Hospital Bellvitge (HUB), a third-level hospital for adults with approximately 860 beds. This is the referral hospital for a population of 1.5 million inhabitants. The ED has approximately 120,000 visits per year (no pediatric or obstetric patients). The SSU was initiated in 1997; it has 24 beds, its own staff 24 hours a day and depends directly on the ED. The decision on SSU admission is taken by consensus between the attending ED physician and the physician responsible for the SSU. After 72 hours, in cases of favorable evolution, patients may be discharged home, receive home hospitalization, or transferred to a sub-acute center. Otherwise, they are admitted to a CH or IMU.

The study period was from November 2005 to April 2007; it included all consecutive cases of HUB patients with a discharge diagnosis of CAP. Diagnostic criteria as recommended in the literature were followed: symptoms compatible with CAP, acute onset of symptoms and the appearance of a new infiltrate on chest X-ray[9]. Patients diagnosed with aspiration pneumonia, lung cancer and others requiring ICU admission during their stay were excluded. Patients with HIV infection, immunosuppression, hemodialysis or those currently institutionalized were not excluded from the study. Enrolled patients were divided into two groups: group 1 comprised those admitted to the SSU, and group 2 (or control group) were those admitted to a CH (internal medicine, pulmonology and infectious diseases unit).

The exclusion criteria for SSU admission of patients with suspected CAP are: a) uncertain diagnosis, b) those receiving intensive treatment, c) suspected nosocomial pneumonia and d) social problems that do not allow early discharge. Age, institutionalization, or immunosuppression or chronic comorbidity are not considered criteria for exclusion.

The study data, entered on a specific data-base, included: a) demographics (age and sex), b) prior health status (comorbidity using the Charlson index), c) objective severity rating at admission (CURB 65 -confusion, uremia, respiratory rate, blood pressure age, ≥65 years, and PSI score), d) episode complexity (mean weight of diagnosis related groups DRG), e) laboratory microbiological determinations from samples collected in the ED or during admission episode (blood, gram and sputum culture, serology for *Streptococcus pneumoniae* and *Legionella pneumophila* serogroup 1 and serology for *Chlamydia pneumoniae, Legionella pneumophila, Coxiella burnetii* and *Mycoplasma pneumoniae)*, f) measures of effectiveness (duration of stay, proportion of patients discharged home versus other hospital units), and g) safety variables (mortality rate, need to revisit the ED and hospital readmission at 10 and 30 days).

Statistical analysis was performed using SPSS for Windows version 15.0. The descriptive analysis of the data appears as mean (SD) or absolute number of cases and percentages (with 95% confidence interval). Differences between qualitative variables were analyzed using chi square test. To study the differences between groups of patients, analysis of variance was used in the case of parametric variables and for non-parametric variables, Mann-Whitney or Kruskal-Wallis test were used (depending on the number of groups). Differences with a p value < 0.05 were considered statistically significant.

Results

A total of 606 patients were included: 187 in Group 1 (SSU) and 419 in Group 2 (CH). Mean age was significantly higher in Group 1 (77.3 ± 12.04 versus 67.9 ± 15.18 years, $p < 0.0001$). Comorbidity rate measured by Charlson index showed no differences between groups. Average GRD weight of episodes showed greater complexity in Group 2 (CH). Mean stay was significantly lower in Group 1 (3.48 ± 1.70 versus

Table 1. General data and comparison of short-stay unit (SSU) versus conventional hospital unit (CH) patients

	SSU (group 1, N = 187)	CH (group 2, N = 419)	p value
Age (years) (mean ± SD)	77.30 ± 12.04	67.93 ± 15.18	0.000
Gender [n (%)]			ns
Men	113 (60.4)	277 (66.1)	
Women	74 (39.6)	142 (33.9)	
Provenance [n (%)]			< 0.05
Home	173 (92.5)	405 (96.7)	
Old-age Home	14 (7.5)	14 (3.3)	
Diabetes mellitus [n (%)]	40 (21.4)	93 (22.2)	ns
COPD [n (%)]	91 (48.7)	152 (36.3)	< 0.01
Fine Index [n (%)]			< 0.001
I	8 (4.3)	31 (7.4)	
II	15 (8.0)	67 (16.0)	
III	80 (42.8)	109 (26.0)	
IV	80 (42.8)	175 (41.8)	
V	4 (2.1)	37 (8.8)	
CURB 65 index [n (%)]			ns
0	22 (11.8)	74 (17.7)	
1	67 (35.8)	158 (37.7)	
2	73 (39.0)	140 (33.4)	
3	23 (12.3)	42 (10.0)	
4	2 (1.1)	4 (1.0)	
5	0 (0)	1 (0.2)	
Average stay (days) (mean ± SD)	3.48 ± 1.70	7.89 ± 6.12	< 0.001
Average Charlson Index (mean ± SD)	1.17 ± 1.43	1.09 ± 1.34	ns
DRG average weight (mean ± SD)	0.97 ± 0.21	1.11 ± 0.65	< 0.001
Destination at discharge [n (%)]			< 0.001
Home	150 (80.2)	390 (93.1)	
Home care	11 (5.9)	17 (4.1)	
Another hospital	2 (1.1)	0 (0)	
Sub-acute Unit	18 (9.6)	1 (0.2)	
Deceased	5 (2.7)	11 (2.6)	
ED readmission within 10 days [n (%)]	8 (5.0)	18 (4.4)	ns
Hospital readmission within 10 days [n (%)]	5 (3.1)	10 (2.5)	ns
ED readmission within 30 days [n (%)]	10 (6.2)	40 (9.8)	ns
Hospital readmission within 30 days [n (%)]	6 (3.7)	23 (5.6)	ns

SD: standard deviation; ED: emergency department; COPD: chronic obstructive pulmonary disease, ns: not significant; DRG: Diagnosis Related Groups.

7.89 ± 6.12 days, p < 0.0001). We observed significant differences in discharge home (80.2% in Group 1 versus 93.2% in Group 2, p < 0.0001). Considering discharge home together with other alternatives to hospitalization (96.2% in Group 1 and 97.5% in Group 2), these differences disappeared. Only 2 patients (1.1%) in Group 1 required transfer to CH, and none to IMU (Table 1).

It is noteworthy that most of the younger patients in PSI risk groups III and IV were admitted to hospital (Figure 1). Regarding age cutoffs, of special interest was the limit of 60 + years (elderly) and older than 90 + years (extremely elderly). Of patients under 60 years (116 in total) with PSI III and IV (44 in total), 43 (97.7%) were in Group 2 (CH) and only 1 (2.3%) in Group 1 (SSU). No patient under 60 years had the maximum PSI V in the sample. In contrast, of the 35 patients with 90 + years, 26 (74.28%) were inGroup 1, and of these, 21 (60%) had PSI IV.

With regard to microbiological findings (Table 2), fewer samples and determinations of sputum, urine antigen, blood cultures and serological tests were performed in the SSU group, and the total number of patients with microbiological diagnosis of the agent responsible for CAP was 60 (31.7%) in the SSU group and 246 (58.7%) in the CH group.

For all levels of PSI, mean age of the patients was higher in the SSU group (Table 3), especially in groups with poor prognosis (III, IV and V). There were no significant differences in Charlson comorbidity index between the groups. However, average weight of the DRG per episode was higher in the CH group, especially in the group of patients with PSI V, although the number of SSU patients with PSI V was very low (4, 2.1%) compared with the CH group (37, 8.8%). For all risk groups, mean stay was shorter in the SSU group than in the CH group.

The results of the sub-analysis of patients with Fine IV in both groups (we excluded from the analysis those patients with Fine V due to the low number of cases in the SSU group) are shown in Table 5. Despite large differences in mean stay time between the groups, no differences were found in 10 and 30-day readmission. Differences did exist in discharge destination, especially in the use of alternatives to CH. Fine IV patients grouped according

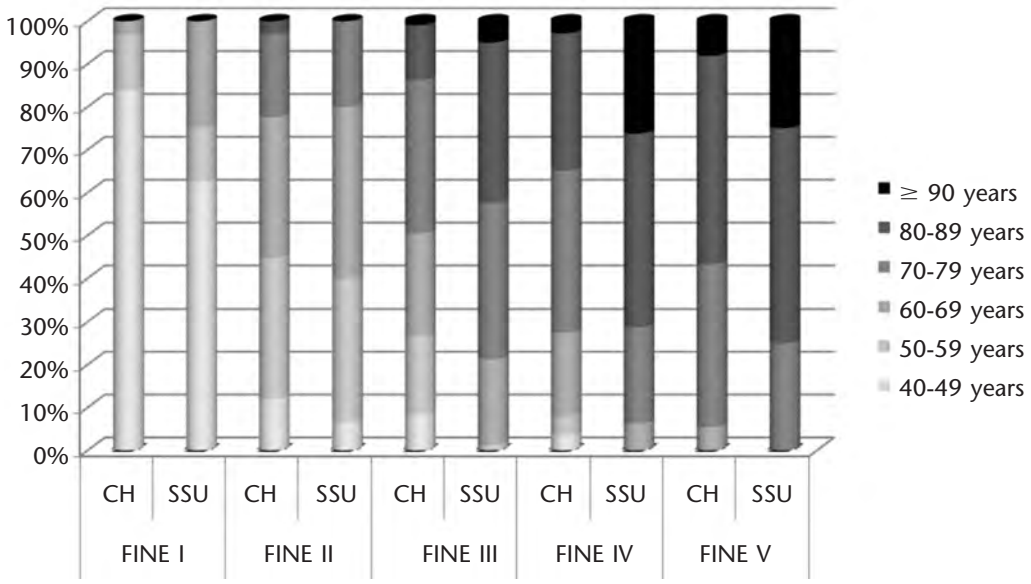

Figure 1. Distribution by age group and Fine index. CH: conventional hospital unit. SSU: short-stay unit.

to age still showed significantly lower length of stay in SSU patients, with no differences in readmissions (Table 4).

Discussion

Early discharge of selected SSU patients with CAP showed similar safety results to CH patients with longer times to discharge, which indicates that the SSU can be an effective and safe alternative to CH. These results were obtained in patients with low levels of severity (PSI I and II), intermediate (III) and PSI IV. Due to the low number of patients with PSI V in the SSU group, no comparison was performed.

The reasons for the significantly lower mean stay times in the SSU group are multifold. First, clear objectives must be established from the time of admission and any reason for possible delayed discharge, once clinical improvement or stabilization has been achieved, must be eliminated, to allow outpatient treatment. A study by Halm et al., published in 1998[18], indicated that the mean time required for stabilization of CAP patients was three days for most of the parameters considered (systolic blood pressure, heart rate, respiratory rate, temperature, oxygen saturation, oral intake and mental state). Nevertheless, 83% remained in the hospital at least one day after stabilization. In the study by Moeller[19], 61.3% of CAP patients remained in the hospital after stabilization. In another study by Fine et al.[20], physicians responsible for the decision on hospital discharge of patients with CAP

Table 2. Microbiological findings (expressed in absolute numbers and percentages of the total number of determinations in each group)

	Sputum culture N (%)		Urinary antigens N (%)		Blood cultures N (%)		Serology during stay N (%)	
	SSU (N = 55)	CH (N = 158)	SSU (N = 119)	CH (N = 382)	SSU (N = 121)	CH (N = 363)	SSU (N = 1)	CH (N = 146)
Negative	26 (47.2)	74 (46.8)	63 (52.9)	176 (46.0)	111 (91.7)	308 (84.6)	1 (100)	133 (91.7)
Streptococcus pneumoniae	14 (25.4)	49 (31.0)	54 (45.3)	183 (47.9)	8 (6.6)	44 (12.0)		
Legionella pneumophila			2 (1.6)	23 (6.0)				4 (2.7)
Branhamella catharralis		7 (4.4)						
Haemophilus influenzae	10 (18.1)	17 (10.7)				8 (2.1)		
Pseudomona aeruginosa	2 (3.6)	4 (2.5)			1 (0.8)	1 (0.2)		
Mycoplasma pneumoniae								1 (0.6)
Chlamydia psitacci								7 (4.8)
Coxiella burnetti								1 (0.6)
Other	3 (5.4)	7 (4.4)			1 (0.8)	2 (0.5)		

SSU: short-stay unit; CH: conventional hospital units.

Table 3. Statistical analysis of data from different subgroups according to Pneumonia Severity Index (PSI) for age, stay time, Charlson index, diagnosis related group (DRG) and mortality

	SSU	CH	p value
Age (years) (mean ± SD)			
Fine I	46.0 ± 13.02	39.06 ± 11.48	< 0.01
Fine II	62.0 ± 9.66	60.06 ± 11.39	ns
Fine III	76.85 ± 7.68	66.46 ± 12.62	< 0.001
Fine IV	83.28 ± 8.03	74.35 ± 11.08	< 0.001
Fine V	86.75 ± 6.85	80.38 ± 7.59	< 0.001
Average length of stay (days) (mean ± SD)			
Fine I	2.88 ± 1.81	5.52 ± 2.34	< 0.001
Fine II	2.67 ± 0.72	7.00 ± 4.48	< 0.001
Fine III	3.39 ± 1.67	6.89 ± 3.35	< 0.001
Fine IV	3.78 ± 1.77	9.09 ± 8.14	< 0.001
Fine V	3.50 ± 2.52	8.76 ± 4.73	< 0.001
Charlson Index (points) (mean ± SD)			
Fine I	0.63 ± 0.92	0.39 ± 0.72	< 0.01
Fine II	0.62 ± 0.51	0.70 ± 0.76	ns
Fine III	1.03 ± 1.03	0.99 ± 1.19	ns
Fine IV	1.54 ± 1.89	1.23 ± 1.35	ns
Fine V	0.67 ± 0.58	2.05 ± 2.08	< 0.01
DRG weight (points) (mean ± SD)			
Fine I	0.97 ± 0.24	0.94 ± 0.24	ns
Fine II	0.88 ± 0.21	1.01 ± 0.43	ns
Fine III	0.95 ± 0.23	1.21 ± 1.13	ns
Fine IV	1.01 ± 0.18	1.11 ± 0.29	ns
Fine V	0.95 ± 0.15	1.16 ± 0.49	ns
Mortality [n (%)]			
Fine I	0	0	ns
Fine II	0	0	ns
Fine III	0	2 (1.8%)	ns
Fine IV	4 (5%)	6 (3.4%)	ns
Fine V	1 (25%)	3 (8.1%)	ns

SSU: short-stay unit; CH: conventional hospital unit; SD: standard deviation, ns: not significant.

were asked to identify the factors underlying prolonging patient stay beyond stability. Only 22% believed that they had prolonged the patient stay time beyond what was necessary. The main reason (56% of cases) was the need to evaluate or treat other concurrent diseases.

Second, it is necessary to fine tune the duration of intravenous antibiotic therapy and continue with oral treatment as soon as possible. Once this change has been implemented, clinically stable patients should be discharged[21]. Siegel et al. found no differences in patient outcomes between those treated with intravenous then oral antibiotics versus those solely treated intravenously[22]. Moreover, Rhew et al. also showed no difference in results of hospitalized patients treated intravenously whether or not they were placed under observation after initiating oral treatment. These authors argue that eliminating this practice could reduce mean stay by at least one day[23].

Third, rapid mobilization of the patient facilitates early discharge. In the SSU, the entire staff are very aware of the need for early mobilization of patients as much as clinical condition permits every day. Mundy et al., in a prospective study, showed that CAP patients mobilized early at least 20 minutes during the first 24 hours of hospitalization, followed by daily mobilization, reduced mean length of stay without increasing the risk of adverse outcomes[24].

Fourth, it is important to avoid the adverse effects of prolonged hospitalization: early removal of urinary catheters, careful management of intravenous catheters, avoidance of aggressive treatments that may exacerbate chronic diseases or cause delirium, etc.[16,25].

Finally, other factors such as early social or socio-sanitary measures, better coordination with other alternatives to conventional hospitalization (subacute units, home hospitalization) can also help reduce mean stay in the SSU.

In our study, the mean age of SSU patients was higher than those admitted to CH, especially of those with PSI III and IV. On analyzing both groups by age decades, we found that younger patients with higher PSI score were more likely to be CH patients, while older patients with lower PSI score were admitted to the SSU. This was logical, because rapid improvement in the more severe cases on admission could not be expected and early discharge was improbable, while those with better clinical condition on admission could be expected to have shorter stay time. The elderly especially benefit from shorter stay since it helps avoid the complications associated with prolonged hospitalization (confusion, delirium, functional impairment, iatrogenic events, nosocomial infections, pressure sores, etc.). This may explain why ED physicians tend to refer elderly patients to the SSU. There are reports on reduced CH stay in patients older than 65 years, with results similar to those of SSU. Capelastegui et al. in a two-year prospective study of 1,886 patients showed that reducing stay time in patients over 65 years from 5.6 to 3.7 days did not compromise safety or medical outcome[26]. Novak et al., in an 18-month study performed in a unit similar to ours, reported that CAP patients with a mean age of 73 years admitted to their SSU had a mean stay time of 4.3 days. Of these, 60% had a PSI of IV, and mean stay was 4.1 days for this subgroup[27].

The proportion of microbiological diagnoses in the CH group was almost double that of the SSU group, with a higher number of microbiological determinations. There seems to be no justification for these differences, since diagnostic protocols are the same for all patients with suspected CAP in our hospital ED. So this is a clear area for improvement in the management of CAP in our SSU. Of all the

Table 4. Outcome of patients in risk group IV of the Pneumonia Severity Index (PSI)

	SSU (N = 80)	CH (N = 175)	p value
General			
Effectiveness			
Average stay (days) (mean ± SD)	3.78 ± 1.77	9.09 ± 8.14	< 0.001
Destination at discharge [n (%)]			
Home	63 (78.7)	157 (89.7)	< 0.001
Home Hospitalization	3 (3.7)	11 (6.2)	
Sub-acute Unit	11 (13.7)	1 (0.5)	
Safety			
Mortality [n (%)]	4 (5)	6 (3.4)	
ED readmission within 10 days [n (%)]	1 (1.3)	6 (3.5)	ns
Hospital readmission within 10 days [n (%)]	1 (1.3)	4 (2.3)	ns
ED readmission within 30 days [n (%)]	2 (2.6)	17 (10.0)	< 0.05
Hospital readmission within 30 days [n (%)]	2 (2.6)	11 (6.5)	ns
By age group			
Number of cases			
40-49 years	0 (0)	6 (3.4)	< 0.001
50-59 years	0 (0)	8 (4.5)	
60-69 years	5 (6.2)	34 (19.4)	
70-79 years	18 (22.5)	66 (37.7)	
80-89 years	36 (45.0)	56 (32.0)	
≥ 90 years	21 (26.2)	5 (2.8)	
Effectiveness			
Average stay (days)			
60-69 years	4.00 ± 1.00	9.82 ± 6.31	< 0.001
70-79 years	3.22 ± 1.39	9.12 ± 6.45	< 0.001
80-89 years	4.19 ± 2.20	7.16 ± 4.18	< 0.001
≥ 90 years	3.48 ± 1.16	9.20 ± 2.58	< 0.001
Safety			
Mortality [n (%)]			
60-69 years	0 (0)	1 (2.9)	ns
70-79 years	1 (5.5)	2 (3.0)	
80-89 years	1 (2.7)	3 (5.3)	
≥ 90 years	2 (9.5)	0 (0)	
ED readmission within 10 days [n (%)]			
60-69 years	0 (0)	1 (2.9)	ns
70-79 years	1 (5.5)	(6.0)	
80-89 years	0 (0)	(1.7)	
≥ 90 years	0 (0)	0 (0)	
Hospital readmission within 10 days [n (%)]			
60-69 years	0 (0)	1 (2.9)	ns
70-79 years	1 (5.5)	3 (4.5)	
80-89 years	0 (0)	0 (0)	
≥ 90 years	0 (0)	0 (0)	
ED readmission within 30 days [n (%)]			
60-69 years	0 (0)	3 (8.8)	ns
70-79 years	1 (5.5)	8 (12.1)	
80-89 years	1 (2.7)	5 (8.9)	
≥ 90 years	0 (0)	1 (20.0)	
Hospital readmission within 30 days [n (%)]			
60-69 years	0 (0)	2 (5.8)	ns
70-79 years	1 (5.5)	5 (7.5)	
80-89 years	1 (2.7)	3 (5.3)	
≥ 90 years	0 (0)	1 (20.0)	

SSU: short-stay unit; CH: conventional hospital unit; SD: standard deviation; ED: emergency department.

determinations performed, blood culture and serology were, proportionally, the least useful in the diagnosis of CAP.

In regard to the total cost of hospital treatment of patients with CAP[28], it is well documented that the reduction of mean stay greatly reduces the total cost. Fine et al. determined that hospital room cost accounted for 59% of the total cost of hospital treatment of CAP, with a saving of $ 680 per day on a total of $ 5,942[29]. In a Spanish study, Bartholomew et al. calculated the cost of hospital treatment at € 1,553. By reducing inappropriate stays, costs could be reduced by 8.1% with a total annual reduction of 17.4%[2]. Thus treatment in SSU can reduce costs by reducing mean stay time[30].

This study has important limitations due to its retrospective design. The decision to refer CAP patients to one or another unit is made by the emergency department physician based on objective cri-

teria, but above all, clinical judgement, and this may result in selection bias. In order to minimize this bias, our analysis excluded all patients requiring intensive care on admission or during their stay. This is the reason for the low mortality per PSI group[4], although no significant differences were found between the groups. Although the general recommendations for admission to our SSU tend to exclude patients with social problems that make early discharge impractical, in daily practice this is often not possible. In fact, the selection of patients is not especially favorable to the SSU, considering the high proportion of patients with comorbidity and from nursing homes, which are risk factors for prolonged stay[31]. The difference between our study groups could suggest that mean CH stay was abnormally long, but a review of the literature review revealed a wide range of mean hospital stay in patients with CAP[16-18,23,32-34]. In any event, the CH group allowed us to determine reference values on mortality rate and return or readmission in our study area and thus assess the acceptability of our SSU results. Overall, it is reasonable to conclude that, in our experience, properly selected CAP patients, including those with PSI IV, can be safely and effectively treated with short hospital stay regimes.

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Análisis de la seguridad y la eficacia de una unidad de corta estancia en el tratamiento de la neumonía adquirida en la comunidad

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Introducción: La neumonía adquirida en la comunidad (NAC) es una patología de alta prevalencia que a menudo requiere ingreso hospitalario. El objetivo de nuestro estudio es evaluar la eficacia y seguridad en el tratamiento de la NAC de una unidad de corta estancia (UCE) como alternativa a las unidades de hospitalización convencional (UHC).
Método: Estudio retrospectivo comparativo de pacientes ingresados en un hospital terciario con diagnóstico al alta de NAC entre noviembre del 2005 y abril del 2007. Se comparan dos grupos: pacientes ingresados en UCE frente a pacientes ingresados en UHC (se excluyen pacientes que requieren terapia intensiva). Variables analizadas: edad y sexo, índice de Charlson, peso según el grupo relacionado de diagnóstico (GRD), CURB 65 y *Pneumonia Severity Index* (PSI), hallazgos microbiológicos, tasas de readmisión y de mortalidad.
Resultados: Un total de 606 pacientes fueron reclutados, 187 ingresados en el UCE (grupo 1) y 419 en UHC (grupo 2 o grupo control). Las diferencias más significativas entre los dos grupos fueron el promedio de edad (77,3 *vs* 67,9 $p < 0,001$) y la estancia promedio (3,48 *vs* 7,89 $p < 0,001$). Estas diferencias se objetivan en el comparativo general y por subgrupos según la escala de riesgo (PSI). No se observaron diferencias significativas en la tasa de mortalidad ni en la de reingreso entre las dos formas de hospitalización.
Conclusiones: La UCE es eficaz y segura en el manejo de los pacientes con NAC, con una estancia media significativamente inferior respecto a las UHC, y sin diferencias en las tasas de mortalidad y reingreso. [Emergencias 2011;23:175-182]

Palabras clave: Neumonía adquirida en la comunidad. Unidad de corta estancia. Estancia promedio. Seguridad. Eficacia.