A history of an antecedent stressful event, emotional or physical, has been described in the majority of patients with TTC,\textsuperscript{1,2,3,4} even when the specific mechanisms relating the stressful event to the left ventricular dysfunction are far from fully elucidated. Different stressful trigger events were identified in our study population, such as confrontations and arguments with friends, relatives, or neighbors; unexpected death of a close relative; receipt of a negative medical diagnosis; fear of invasive mechanical ventilation in patients during the seasonal periods. However, a small but significant increase in the need for invasive procedures; devastating financial losses; and burglary. Given the limited data available, we are not able to exclude the possibility of a seasonal variability of the susceptibility of predisposed patients to TTC development (ie, when the patients are subjected to proper stressful trigger events). However, TTC onset time frequently depends on a stressful trigger event occurrence that cannot be anticipated or predicted because, unfortunately, it occurs randomly. Different patterns of trigger event occurrence times between the different enrolled study populations may at least in part explain the reason why a pattern of summer occurrence of TTC onset was not confirmed in our cohort.

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**First Influenza Season Outbreak After 2009 Pandemic Influenza A(H1N1) in Spain**

To the Editor:

Several reports have been written about the pandemic 2009 influenza A\textsuperscript{(H1N1)} (A[H1N1]). However, little information is available on the emergence of the later strain, new virus A(H1N1) (An[H1N1]) in the winter of 2010 to 2011.\textsuperscript{1} Unexpectedly, during the European winter of that period the usual seasonal viruses were replaced by the An[H1N1], and in Spain, 447 patients with severe infection were admitted to the ICU. Although the presenting features of An[H1N1] influenza were quite similar to those described for patients in the ICU with A[H1N1],\textsuperscript{2} some differences should be pointed out. The patients with An[H1N1] were somewhat older (49.7 ± 14.3 years vs 44.7 ± 14.9 years); similarly, the frequency of increased disease severity [Acute Physiology and Chronic Health Evaluation] II score 16.4 ± 7.4 vs 13.9 ± 7.2) and multiorgan dysfunction (Sequential Organ Failure Assessment score 6.3 ± 3.8 vs 5.5 ± 3.5) were higher ($P<.001$) in patients with An[H1N1] than those observed previously in patients with A[H1N1].\textsuperscript{3} The frequency of comorbidities was similar in both periods, but there was an increase in the number of patients with hematologic disease (11.1% vs 5.3%, $P<.001$) and HIV infection (4.1% vs 2.1%, $P=.03$).\textsuperscript{4} Viral pneumonia was the leading cause of hospitalization in both periods. However, a small but significant increase in the need for invasive mechanical ventilation in patients during the seasonal outbreak (69% vs 61.5%, $P<.01$) was observed.\textsuperscript{5} The implementation of early (<2 days) antiviral therapy was associated with

![Figure 1](http://journal.publications.chestnet.org/pdfaccess.ashx?url=/data/journals/chest/23323/ on 06/26/2017)
a better survival rate. Although all patients received antiviral treatment, in the seasonal outbreak, a 1-day delay (5 days instead of 4 days) in the antiviral administration was observed. This apparent treatment delay could be associated with a corresponding difference in the time from symptoms onset to hospital (4.9 days vs 4.3 days, \( P < .01 \)) or ICU admission (2.3 days vs 1.8 days, \( P < .01 \)). All of these variables must be considered to explain the higher mortality rate observed in patients undergoing invasive mechanical ventilation during the seasonal outbreak of An(H1N1)(42.6%) compared with patients with A(H1N1)(34.2%, \( P < .001 \)).

In the seasonal outbreak, a 1-day delay (5 days instead of 4.3 days, \( APACHE II \) score (OR = 1.1, 95% CI, 1.06-1.12), invasive mechanical ventilation (OR = 8.3, 95% CI, 4.32-15.91), hematoletic disease (OR = 3.0; 95% CI, 1.66-5.49), HIV infection (OR = 3.9; 95% CI, 1.38-11.51), and antiviral therapy (OR = 0.45; 95% CI, 0.28-0.73) were variables independently associated with mortality. Finally, only 6.2% of patients admitted to the ICU during the seasonal outbreak were intubated, and they seemed to have a more favorable outcome with shorter ICU stay (3 days) and fewer days under invasive mechanical ventilation (3 days).

Seasonal flu during the winter of 2010 to 2011 was dominated by the An(H1N1) virus and survival of intubated patients was <60%. Delay in diagnosis, a low rate of vaccination, and suboptimal antiviral therapy indicate the need to improve educational measures and public information management for the coming years.

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Which Mask for Noninvasive Ventilation in Acute Respiratory Failure?

To the Editor:

We read with great interest the recent report in CHEST (May 2011) by Oszsancak et al1 comparing the total face mask (TFM) with the oronasal mask (ONM) for the treatment of acute respiratory failure by noninvasive mechanical ventilation (NIV). The authors found similar early NIV discontinuation rates in the TFM and ONM groups (16 of 29 vs 12 of 31, respectively). They also found that the median duration of NIV with the TFM was significantly shorter than with the ONM (6.05 h vs 15.7 h, excluding the total duration of NIV performed with the TFM and after the switch to the ONM). Figures 5 and 6 of their article showed similar improvement in dyspnea, respiratory rate, and oxygen saturation for both groups at 0.5, 1, and 3 h. However, the figures do not show the trend of PaCO2, although its improvement was indicated as similar in the text, with \( P > 0.05 \).

We would like to know what the mean improvement time of PaCO2 and the mean duration of effective NIV (ie, not discontinued early [\( n = 12 \) of 29 TFM, 18 of 31 ONM]) were for each group in order to understand whether the TFM or the ONM permitted significantly quicker changes both in symptoms and in hemogas analysis. We also ask because none of the 12 patients using an ONM who discontinued use early from NIV was switched to a TFM. We believe that these points would permit us to better realize the advantages of one of the two masks in an acute setting.

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