Severe community-acquired pneumonia: Assessment of severity criteria

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The purpose of the study was to validate the criteria used in the guidelines of the American Thoracic Society (ATS) for severe community- acquired pneumonia (CAP). Severe pneumonia was defined as admission to the intensive care unit (ICU). Overall 331 nonsevere (84%) and 64 severe cases (16%) of CAP were prospectively studied. Mortality was 19 of 395 (5%) and 19 of 64 (30%), respectively. Single severity criteria as well as the ATS definition of severe pneumonia were assessed calculating the operative indices. A modified prediction rule including minor (baseline) and major (baseline or evolutionary) criteria was derived. Single minor criteria at admission had a low sensitivity and positive predictive value. Defining severe pneumonia according to the ATS guidelines had a high sensitivity (98%). However, specificity and positive predictive value were low (32% and 24%, respectively). A modified prediction rule (presence of two or three minor criteria [systolic blood pressure < 90 mm Hg, m