Long-term Outcome and Disease Control in Near-fatal Asthma

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Abstract

Patients who have survived an episode of intubation and mechanical ventilation for acute respiratory failure due to a severe and unresponsive asthmatic attack are considered to have experienced a near-fatal asthma (NFA) attack. Such patients are at a higher risk of similar severe attacks and hence of death in the future.

The aims of the study were to: (i) evaluate the outcome; (ii) identify any persistent deficiencies in asthma management, and (iii) assess self-management knowledge in survivors of NFA. Ninety-three consecutive patients who had been treated for NFA in the Intensive Care Unit of an urban teaching hospital in Singapore from 1992 to 1997 were studied. All hospital records were reviewed retrospectively. Survivors were then invited to attend a questionnaire interview and to have lung function tests performed. Of the original cohort (OC) of 93 patients with NFA (mean age 55.2 years), 18 (19% OC) patients (mean age 64 years) had died while in hospital and 75 (81% OC) patients survived the initial episode of NFA and were discharged home (DH). The long-term outcome of this DH group was: 13 patients had died (17% DH) and 62 (83% DH) survived. Of these survivors, 35 were interviewed while 27 declined or were not contactable. This interview yielded the following information:

(i) Hospitalisation in the past year: 66% had no hospital admission; of the 31.4% who had 2 or more admissions, most had a further NFA attack.

(ii) Health care: The majority of patients (71.4%) were monitored by a single doctor.

(iii) Patient knowledge of disease management was deemed good to fair for trigger avoidance (77%), for appropriate drug usage (97%).

(iv) Satisfactory inhaler skill (80%).

NFA is associated with a high intrahospital and long-term mortality. Although most survivors of NFA appeared to have satisfactory care and a fair understanding of medication usage, a significant minority continue to pose much morbidity and risk for death.


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