A Cohort of Ventilated Patients with West Nile Virus Infection

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Outcomes of patients requiring mechanical ventilation for flaccid paralysis and acute respiratory failure caused by West Nile virus are unknown. We identified 11 such patients (27% female) who were transferred to a long-term acute care facility for weaning from prolonged mechanical ventilation. Average age was 62.8 ± 12.2 years. Common features on original presentation were weakness (100%), altered mental status (73%), fever (64%), myalgias (55%), headache (55%), and meningismus (27%). Of the 11 patients, five (45%) were weaned, three remained ventilator-dependent, and three died. Of survivors, one was discharged home, six were transferred to an acute rehabilitation facility, and one to a skilled nursing facility.

Maximum inspiratory pressure, measured in five patients on arrival to the facility, was 41 ± 25 cm H_20. Successfully weaned patients had lower APACHE II scores on arrival at the facility than did patients who failed weaning or died (12.5 ± 4.1 vs. 8.4 ± 4.3; p=0.02). Duration of mechanical ventilation in patients who successfully weaned was higher than in a group of historical controls (62.4 ± 32.3 vs 37.6 ± 9.6 days, p=0.06). In-hospital morality was 27%—comparable to mortality of 31% for patients requiring prolonged ventilation at a long-term-acute care facility (***Chest*** 2002; 122-37S).

In summary, patients with flaccid paralysis and respiratory failure secondary to West Nile virus require more time for weaning than an average patient admitted to a long-term acute care facility, although mortality and rate of weaning are comparable to the average patient in such a facility.