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Electrical shutdown in Dialysis Units: Facing the Darkest Hour

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Electrical power outage is no uncommon under various disastrous situation as well as in our daily life. Electrical power outage is an essentially unexpected event, whereas the consequence of which may be catastrophic in hemodialysis (HD) units. It is best illustrated in a series of events following Great East Japan Earthquake Disaster (GEJED) in 2011. It is readily expected that HD units should be vulnerable to large-scale disaster, as the machinery in HD units depend on electrical power supply. Indeed, during GEJED, electrical power outage was the most common cause for the interruption of dialysis therapy. On the basis of a survey on HD therapy after GEJED, the Working Group for Survey of Dialysis Therapy during GEJED proposed recommendations to countermeasure future disaster, one of which is that the supply of power using private power generation systems is highly effective at large facilities. Similarly, Korean Society of Nephrology also released a guideline to manage the events following disasters in HD units, and suggested that the equipment of private power generation systems (*e.g.*, uninterruptible power supply) in preparation for disaster may be highly effective in dialysis units. Most importantly, dialysis unit personnel should be practiced and prepared for electric power outage to minimize the damage to patients who will be on dialysis at the moment.