endemic pharyngitis at a rate similar to that of group A beta-hemolytic streptococcus, with a reported incidence of about 10% [4,7]. Therefore, in addition to group A streptococcus, *F. necrophorum* should be considered when adolescent patients present with pharyngitis. Recently, more cases of MRSA-associated Lemierre's are now being reported, which we found in our study population [5,6]. Currently, there is no rapid diagnostic test available to identify *F. necrophorum* pharyngitis [7]. When pharyngitis does not improve as expected with typical antibiotic coverage (within 3–5 days) and unilateral neck swelling develops, physicians should consider an expanded differential diagnosis for uncommon infectious sources [4]. This should include suppurative complications (peritonsillar abscess and the Lemierre syndrome), group A, C, or G streptococcal pharyngitis, infectious mononucleosis, and acute HIV infection [4]. Diagnostic imaging, including cervical and thoracic CT and/or ultrasound should be considered. If the patient has bacteremic symptoms, it has been suggested to treat either with a combination of penicillin and metronidazole, or with clindamycin alone to target *F. necrophorum* and streptococcal infections [4]. If MRSA is isolated, antimicrobial regimens must be adjusted accordingly.

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patients died in the intensive care unit (ICU) within 3 days. Three patients survived after PCPS therapy (survival rate: 42.9%) and underwent thrombolytic therapy or cardiac catheterization for their specific causes of cardiac arrest (Table 1). The average hospital stay, ICU stay, PCPS days, and ventilator days were 22.7, 15.3, 4.3, and 11.0 days, respectively. All surviving patients had favorable neurologic outcomes (Cerebral Performance Category scale of 2) 3 months after hospital discharge. Two complications—1 radial artery tear caused by the cardiac catheterization and 1 of diabetes insipidus—presented in the surviving patients.

We conducted this protocol and revealed that EPs and ENs could successfully operate PCPS after training. This protocol in emergency department achieved a high success rate in implementing PCPS, even in difficult conditions; that is, most implementations were conducted in a state of cardiac arrest. Although the sample size in our study was small, we believe that rapid application of extracorporeal cardiopulmonary support in our emergency department may provide therapeutic benefits. Studies in Taiwan and Japan indicated a favorable neurologic outcome of survival after PCPS (Cerebral Performance Category scale of 1 or 2; Tsai vs. Shirakabe: 100.0% vs. 85.7%) [6]. The results demonstrated the potential of PCPS to serve as an effective resuscitative method in patients in cardiac arrest or cardiogenic shock states.

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