Successful treatment of mediastinitis after cardiovascular surgery using electrolyzed strong acid aqueous solution.

Hayashi H*, Kumon K, Yahagi N, Haruna M, Watanabe Y, Matsui J, Hattori R.

Author information
1 Surgical Intensive Care Unit, National Cardiovascular Center, Osaka, Japan.

Abstract

Dilute povidone-iodine solution has been widely used as an irrigant for the treatment of mediastinitis. However, its use is not without adverse effects and often causes poor growth of granulation tissues. To avoid the problems seen with the use of povidone-iodine solution, we applied electrolyzed strong acid aqueous solution (ESAAS) to mediastinal irrigation in 4 patients (2 infants and 2 adults) who developed mediastinitis after cardiovascular surgery. According to the "open" method, the mediastinal wound was left open and irrigated with ESAAS 1 to 3 times a day until the infection was eradicated. Satisfactory growth of granulation tissues was observed in all patients treated with no evidence of adverse effects attributable to ESAAS. Delayed primary sternum closure was performed for 2 patients, and musculocutaneous transposition of rectus abdominis for 1. Our experience suggests that irrigation with ESAAS is a safe and effective method of therapy for mediastinitis.

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