Management of complicated parapneumonic effusion and empyema using different treatment modalities.

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Source

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Abstract

To evaluate the efficacy of the 3 treatment modalities (intrapleural instillation of streptokinase, video-assisted thoracoscopic surgery, thoracotomy and decortication) in the management of complicated parapneumonic effusion and empyema, a prospective study was conducted between January 2008 and June 2010. The 69 patients (52 men and 17 women, aged 18-50 years) were divided into 3 groups: 20 patients underwent intrapleural administration of streptokinase, 25 underwent video-assisted thoracoscopic surgery, and 24 had thoracotomy and decortication. Perioperative variables, mortality, and procedure success were compared among groups. In all groups, preoperative variables were well matched for age, sex, and clinical stage according to Light's classification. No allergic or hemorrhagic complication occurred. Operative time was significantly shorter in patients undergoing video-assisted thoracoscopic surgery. There was no intraoperative complication in the 2 surgically treated groups. Length of hospital stay and duration of chest drainage were significantly shorter after video-assisted thoracoscopic surgery. Procedure success was 50% after streptokinase, 92% after video-assisted thoracoscopic surgery, and 100% after thoracotomy and decortication. There was no perioperative mortality in any group. Video-assisted thoracoscopic surgery is a safe and effective treatment modality for complicated parapneumonic effusion and pleural empyema. Earlier intervention with video-assisted thoracoscopic surgery may produce better clinical results.