Surgical treatment of pyothorax

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Abstract

Pyothorax remains a major source of morbidity and health care expenditure related to thoracic surgery. Early intervention for pleural space infections is necessary for preventing refractory pyothorax. Although the advent of video-assisted thoracoscopic surgery has made the treatment of empyemas possible, management of empyema still remains a challenge. We conducted a retrospective analysis of 12 patients who underwent thoracic surgery for empyema between January 2009 and December 2012 at National Hospital Organization Hakodate Hospital (median age 68 years, 10 males and 2 females, 6 right sided and 6 left sided empyemas, median disease duration 43 days, 10 acute and 2 chronic, 3 with fistula and 9 without fistula). The clinical symptoms included fever (7 cases), cough (10 cases), dyspnea (8 cases), appetite loss (6 cases), weight loss (3 cases) and chest pain (5 cases). The microorganisms identified preoperatively were Methicillin-Sensitive Staphylococcus Aureus (3 cases), Methicillin-Resistant Staphylococcus Aureus (2 cases), Staphylococcus sp. (3 cases), Streptococcus sp. (2 cases), Escherichia coli (1 case), Aspergillus (2 cases) and Candida sp. (2 cases). Thoracic lavage was performed preoperatively in 4 cases. Video-assisted thoracic surgery was performed in 8 cases. The surgical procedures performed included decortication (9 cases), curettage (8 cases), extraperiosteal air plombage (1 case), omentoplasty (2 cases), fenestration (1 case) and pleuro-pneumonectomy (1 case). Postoperative complications included atelectasis (2 cases), pneumonia (2 cases) and deep-vein thrombosis (1 case). Seven cases survived with no recrudescence of pyothorax, while 5 died due to other diseases.

Biography

Hiromitsu Domen graduated from Hokkaido University School of Medicine at the age of 28. He is a specialist in thoracic and digestive tract surgery in Japan. He has published more than 15 papers in reputed journals.