

Pulmonary Embolism after Gynecologic Surgery : Early Detection by Pulse Oximetry and Risk Factors of Pulmonary Embolism

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Abstract : The occurrence of pulmonary embolism after gynecologic surgery without prophylaxis for deep venous thrombosis was investigated. The medical records of 533 consecutive patients, from January 1996 through August 1998, who underwent gynecologic surgery lasting more than 30 minutes, were retrospectively reviewed. Pulmonary embolisms developed in 15 (2.8%) of the 533 patients. Fourteen (93%) of the 15 patients suffered from pulmonary embolism in the first three postoperative days. Five (33%) of the 15 patients had symptoms related to pulmonary embolism; however, 10 (67%) did not show any symptoms. The clue to pulmonary embolism in the asymptomatic patients was just a decrease in oxygen saturation detected by pulse oximetry. No patient died of pulmonary embolism. The patients who developed pulmonary embolism were significantly older, more obese, underwent a longer operation, had a greater blood loss, and received more lymph node dissections ($P < 0.01$), in comparison to those who did not develop pulmonary embolism. Our findings showed that pulmonary embolism was not rare in patients who underwent gynecologic surgery without any prophylaxis. Pulse oximetry was useful for detecting asymptomatic pulmonary embolism. Aged and obese patients who underwent longer operations were at an increased risk of developing pulmonary embolism.

Key words : Gynecologic surgery, Postoperative complication, Pulmonary embolism, Pulse Oximetry