

90, and 120 min of ventilation ($p < 0.05$). PaO₂ deteriorated 30 min and 60 min after administration of FC-77 in the PLV and surfactant + PLV groups, respectively. Mean carbon dioxide tension in arterial blood (PaCO₂) was kept between 20 and 40 mmHg throughout the ventilatory period for the surfactant, surfactant + PLV, and no-treatment groups (Fig. 1B). PaCO₂ values for the PLV group after 90 min of ventilation were significantly higher than those for the surfactant, surfactant + PLV, and no-treatment groups ($p < 0.05$).

Pressure-Volume Curves

With regard to the static pressure-volume curves,

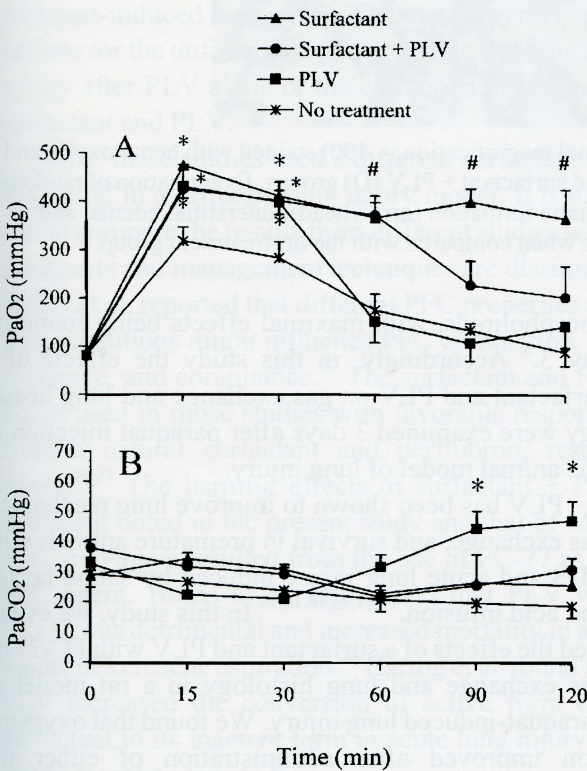


Fig. 1. Changes in mean PaO₂ and PaCO₂ in the surfactant, surfactant + PLV, PLV, and no-treatment groups during the study period. Values at time 0 are pretreatment arterial blood gases performed on spontaneously breathing rats. (A) Mean PaO₂ values. * $p < 0.05$ vs. no treatment, # $p < 0.05$ vs. the PLV and no-treatment groups at each time point. (B) Mean PaCO₂ values. * $p < 0.05$ vs. the surfactant, surfactant + PLV, and no-treatment groups at each time point.

the measured lung volumes at pressures of 10 to 25 cmH₂O for the surfactant and surfactant + PLV groups were significantly higher than those of the no-treatment group ($p < 0.05$) (Fig. 2).

Neutrophil Count

Mean neutrophil counts per hpf in lung specimens were significantly higher in the no-treatment group than that in the surfactant, PLV, and surfactant + PLV groups ($p < 0.05$) (Fig. 3). For the 3 treatment groups, mean neutrophil counts per hpf were significantly

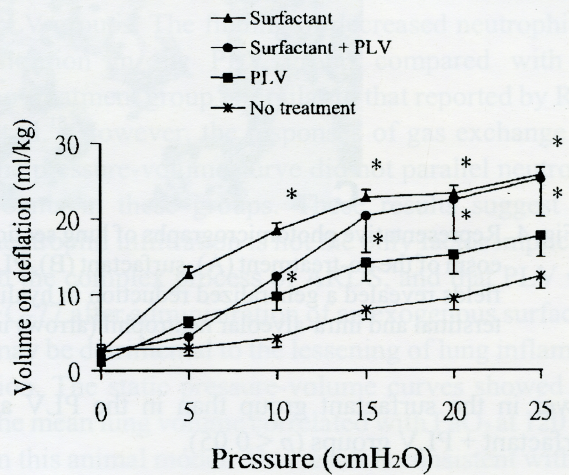


Fig. 2. Deflation pressure-volume curves in the surfactant, surfactant + PLV, PLV, and no-treatment groups. * $p < 0.05$ vs. the no-treatment group.

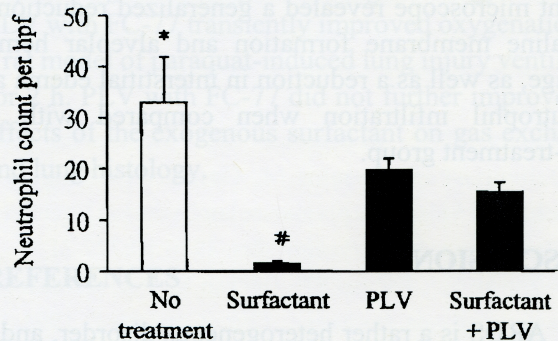


Fig. 3. Neutrophil counts per high-power field (hpf) ($\times 400$) in lung specimens of rats from the no-treatment, surfactant, PLV, and surfactant + PLV groups. * $p < 0.05$ vs. the surfactant, PLV, and surfactant + PLV groups. # $p < 0.05$ vs. the PLV and surfactant + PLV groups.