**EFFECT OF PLEURAL INTEGRITY DURING ITA HARVESTING ON POSTOPERATIVE RESPIRATORY FUNCTIONS AFTER CARDIAC SURGERY**

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**Objective:** The aim of this study is to evaluate the effects of pleural integrity on respiratory system functions after cardiac surgery.

**Methods:** In a prospective cohort study design, 114 patients were divided into two groups: open (group I, n=56) and intact pleurae (group II, n=58). Arterial blood gas values [pH, partial arterial oxygen pressure (Pa02), partial arterial carbon dioxide pressure (PaC02) and arterial oxygen saturation (Sp02)], respiratory and heart rates were evaluated peroperatively. Preoperative and 5th postoperative day values of forced expiratory volume in the 1st second (FEV1%), forced vital capacity (FVC%) and FEV1/FVC% were compared.

**Results:** Extubation time and duration of mechanical ventilation were similar in both groups (p>0.05). There was a significant decrease of FEV1and FVC of open vs. intakt group regarding preoperative and 5th postoperative day (p<0.001, p<0.001, respectively). There was no significant difference within the groups on PaCO2 in arterial blood gas (Open; 38.6±3.5 vs. 39.0±4.2 mmHg, Intakt; 37.8±2.3 vs. 38.1±2.1 mmHg, p=0.49) at room air before surgery and on the first postoperative day (p>0.05). However, significant decrease was observed in PaO2 (p=0.006 vs. p<0.001) and SpO2 (p<0.001 vs. p<0.001) levels of groups between the preoperative and 5th postoperative day values. The only significant difference regarding postoperative complications, which was higher in group I (p=0.003), was observed in bleeding on 1st postoperative day.

**Conclusion:** Hence, based on the findings of the studies mentioned above, opened pleurae did not associate with higher incidence of pulmonary complications when compared to intact pleura.