

Predictors for appendicectomy severity and outcomes

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Aim: This retrospective analysis aimed at evaluating appendicectomy outcomes in view of in-hospital delay and identifying predictive factors for complicated appendicitis.

Methods: A total of 102 adult patients who had aortic valve replacement from May 2020 to April 2022 were randomly divided into observation group and control group with 51 patients in each group. Patients in observation group had minimally invasive right intercostal parasternal incision while patients in control had conventional median sternotomy incision for aortic valve replacement. Preoperative basic data, intraoperative surgical indicators, and postoperative surgical results from both groups were comparatively analysed. All the enrolled patients were from single research center but came from different geographic regions and were of various ethnicities.

Results: No significant differences in basic preoperative data like gender, age, BMI, diagnosis of AV disease type, comorbidities, AV annular diameter, NYHA class of heart failure, 2-D echocardiographic indicators between two groups ($P > 0.05$).

No significant differences in aortic cross-clamp time, cardiopulmonary bypass time, operation time length, whole blood transfusion volume, platelet transfusion volume, and cryoprecipitate transfusion volume between two groups ($P > 0.05$). Transfusion volume of RBC and FFP were lower in observation group than control group ($P < 0.05$).

No statistical difference in postoperative conditions like LA diameter, LVEF, LV diastolic diameter, LV systolic diameter, interventricular septum thickness, LV posterior wall thickness, incision infection, and perioperative death between two groups. Postoperative ventilation time, postoperative total drainage volume, postoperative hospitalization time, postoperative ICU stay, postoperative blood transfusion rate, drain-tube functioning time length were significantly shorter in observation group than control group ($P < 0.05$).

Conclusion & Significance: Minimally invasive right intercostal parasternal incisional approach has far better patient outcomes compared to conventional median sternotomy incisional approach, thereby, provides enhanced recovery after surgery (ERAS) and can be swiftly discharged from hospital.

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