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## Abstract

**Background:** Recoarctation after coarctation of aorta surgical repair remained to be one of the major adverse postoperative outcomes

**Objective:** We aimed to determine the associated risk factors of recoarctation after coarctation of aorta surgical repair

**Methods:** The study was a retrospective review of the medical records between January 2011 and December 2021. We included all patients diagnosed of coarctation of aorta whose aged range from birth to 18 years old, had surgically coarctation repaired and been followed up at Siriraj hospital. The results were recorded on the case record form and analyzed by IBM SPSS Statistics Data Editor

**Results:** One hundred and seven patients were included. The median age of diagnosis was 43 days (IQR 11-121). Twenty-seven patients (25.2%) were diagnosed of recoarctation by clinical and echocardiography on the follow up with the median interval of 12 months (IQR 5-35) from the previous surgery. In univariable analysis, the residual coarctation after the surgery was the only factor that significantly associated with recoarctation (P value < 0.001)

**Conclusion:** The postoperative residual coarctation defined by the echocardiography has shown to be a significant parameter to predict the recoarctation

**Key words:** Coarctation of aorta, Recoarctation , Residual coarctation , Risk factors , Surgery