

# Coronary injury post valve surgery: Don't miss intraoperative diagnosis

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## Abstract

We read with interest the case report by Ackah and colleagues<sup>1</sup>. We previously reported, in a cohort study<sup>2</sup>, our experience in the management of coronary injury post valve procedures

Coronary injury post valve surgery: Don't miss intraoperative diagnosis

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*To the editor*

We read with interest the case report by Ackah and colleagues<sup>1</sup>. We previously reported, in a cohort study<sup>2</sup>, our experience in the management of coronary injury post valve procedures. Mechanism and different etiologies of coronary injury, which we called iatrogenic, post valve procedure were outlined in the article. Prompt diagnosis is essential to save patient life in such complication. High index of suspicion of coronary injury is the best tool for early diagnosis. Such dreadful complication should come to mind once there is difficulty of weaning, arrhythmias, ECG changes, especially ST elevation, depression, or block. Intraoperative confirmation of coronary injury is assisted by intraesophageal echocardiography demonstration of new wall motion abnormality. We encourage intraoperative diagnosis to avoid myocardial injury. 80% of our patients were diagnosed and managed intraoperatively. Two patients post-surgical aortic valve replacement (SAVR) showed inferior wall ischemia by ECG and hypokinesia by TEE resulted in severe LV dysfunction post weaning and requiring high inotropes and received saphenous vein graft to the right coronary artery on a beating heart. One patient also, post SAVR, was difficult to wean with recurrent ventricular fibrillation, stabilized after IMA to LAD. Another old female, 80 years old, post conventional mitral repair weaned on large doses of inotropes and TEE showed new lateral wall hypokinesia, immediately improved after saphenous vein graft to lateral obtuse marginal branch. Probably the ring sutures were impinging on the circumflex coronary artery. Only one middle aged lady, post minimal access mitral repair, experienced ischemia in ICU, two hours post op, and was taken for coronary catheterization which showed main circumflex narrowing and was successfully stented. In Ackah and colleagues case report, the circumflex lesion was evident preoperatively, more than moderate and complicated by a thrombus. Prompt intraoperative diagnosis and management was feasible without catheterization. Stenting would have been safe without a revisit to the operating room<sup>3,4</sup>.

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