# Right Coronary Artery Injury after Tricuspid Ring Annuloplasty 

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## Abstract

A 60 years old man was operated on for an aortic valve replacement associated with a tricuspid ring annuloplasty. An ischemic event occurred and the tricuspid ring was removed.

## Keywords

Tricuspid ring; Coronary artery

## Description

A 60 years old man was operated on for a severe aortic insufficiency. The tricuspid annulus diameter was 45 mm without tricuspid insufficiency. An Abbot mechanical aortic valve replacement associated with a prophylactic ring annuloplasty was performed.

An ischemic event occurred one hour after the transfer to the intensive care unit without hémodynamique instability. Therefore a coronarography was urgently performed. A kinking of the second segment of the right coronary was found (RCA), well seen in Figure 1.


Figure 1: Right coronary injury by the tricuspid annulus.
The tricuspid ring was very close to the RCA. The patient was immediately re-operated and the ring was removed without any other procedure. The corchromatographowed a restoration of the RCA shape (Figure 2). The follow-up was uneventful and the ischemic event was fixed. The echocardiography before discharge at one week showed a left ventricular ejection fraction of 50\% without dyskinesia.


Figure 2: Right coronary normal after tricuspid annulus removal.

Such events are unfrequent but described in the literature [1-3]. The prognosis is worse when the right ventricular is injured by the ischemic event [2]. This case is original because the resolution of the problem was obtained by the ring ablation. A RCA bypass grafting or dilatation with or without drug-eluting stenting are most often performed and the annulus ring is not usually removed [1-3].

## References

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