

# Outcomes of patients who undergo elective covered stent treatment for coronary artery aneurysms

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## Background

Coronary artery aneurysms (CAA) are reported in up to 5% of patients undergoing coronary angiography. Treatment of CAAs with covered stents has been reported in several case reports, however there is limited evidence available on the effectiveness and safety of this interventional practice.



## Results

A total of 63 case reports and 3 case series were included in the final analysis comprising data from 81 patients.

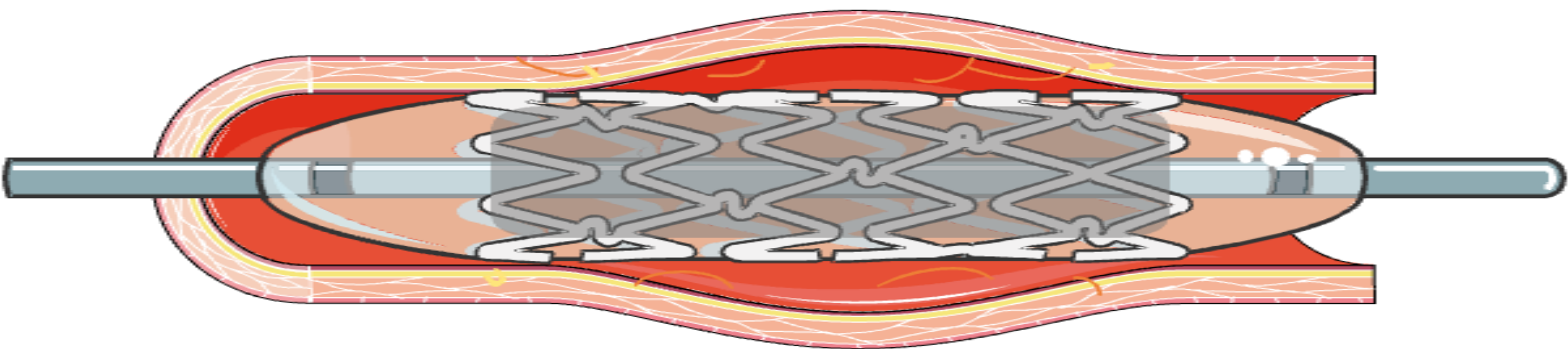
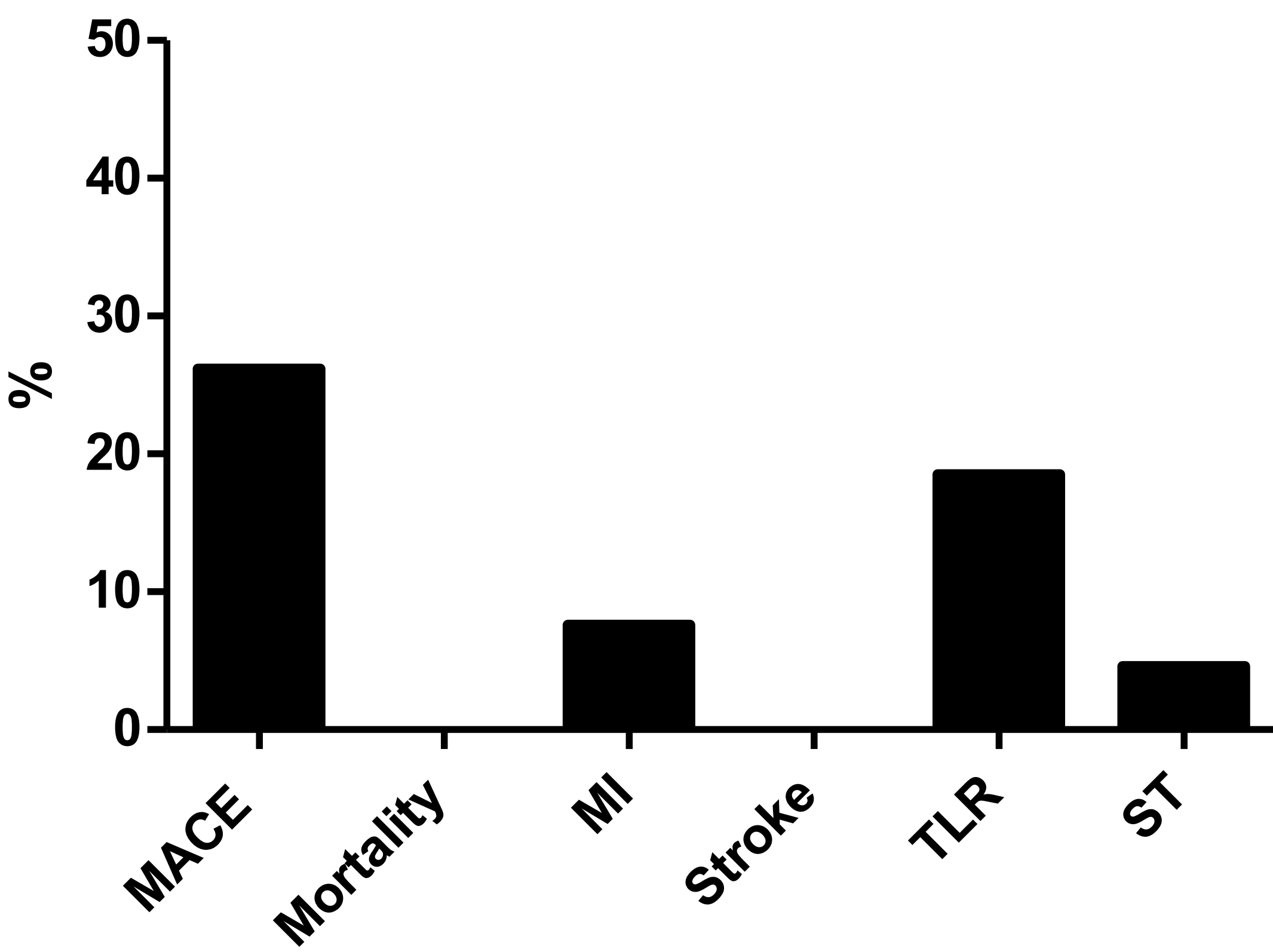
Demographics and lesion characteristics	% [n/available info]
Male	74.1 [60/81]
Mean age [years±SD]	58.9±14.9
Native vessel	92.6 [75/81]
Vein graft	7.4 [6/81]
Type of stent	
PTFE	75.3 [61/81]
Papyrus	11.1 [9/81]
Outcomes	% [n/available info]
Mean follow up [months±SD]	13.4±15.5
Follow up mortality	0.0 [0/65]
Follow up MACE	26.2 [17/65]
Cardiac death	0.0 [0/65]
Stroke	0.0 [0/65]
Myocardial infarction	7.6 [5/65]
Stent thrombosis	4.6 [3/65]
In-stent restenosis	21.5 [14/65]
Target lesion revascularization	18.5 [12/65]

## Purpose

To evaluate the current practice and outcomes of elective treatment of coronary artery aneurysms with covered stents.

## Methods

We conducted a systematic review of published case reports and case series of patients presenting with CAA that have been treated with covered stents in a non-emergency setting.



Covered stent placed in a CAA , Servier medical art

## Conclusion

The use of covered stents for elective treatment of CAA appears to be effective and reasonably safe. Nevertheless, it is associated with higher MACE rate, driven mainly by higher target lesion revascularization. Further studies, particularly in form of randomized trials and controlled registries are warranted to identify patients who might profit the most from this procedure

Declaration of interest: Nil