

## **SUMMARY**

In the present study, we evaluated the clinical outcome after PCI for treatment of ISR using either the cutting balloon angioplasty or the conventional PTCA.

We studied thirty patients with different clinical characteristics and ISR patterns at presentations.

PCI to ISR using the cutting balloon was performed for six patients and the conventional PTCA balloon was used in the other forty-two patients.

Twenty-three patients had diffuse ISR at presentation, while the remaining seven patients had focal ISR.

Procedural success was defined as  $\leq 20\%$  residual narrowing post PCI. The success rate in the current study was 100%.

All patients were followed-up for six months both clinically for major adverse cardiac events and by exercise treadmill testing.

At 3 months, one patient developed unstable angina and repeat coronary angiography revealed the recurrence of ISR (totally occlusive pattern) and CABG was recommended for him.

At 6 months, one patient had a positive exercise treadmill testing result. She underwent repeat coronary angiography that revealed the recurrence of focal ISR. She underwent repeat PCI.

The remaining 28 patients had favorable clinical outcome, they were either asymptomatic or had mild stable angina and negative exercise test results.

We found no difference between the cutting balloon and the conventional PTCA balloon as regard the in-hospital and the six-months clinical outcome in various patterns of ISR.