

## COARCTATION ANGIOPLASTY AND STENTING IN A COMPLICATED CASE

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### HISTORY AND PHYSICAL EXAMINATION

28-year-old woman who was referred to another cardiac center with hypertension crisis. During the work up, significant coarctation of the aorta was detected. After the initial evaluation, coarctoplasty was planned. After wiring, an uncovered 20 × 40 mm CP stent was chosen and deployed at the site of the coarctation. However, the stent could not be dilated sufficiently. After 4 months, the same operator used a self-expandable 20 × 40 mm stent to dilate the previous stent, but the stent jumped. Another self-expandable 24 × 60 mm stent was then positioned. This time, the stent did not jump, but it failed to open and dilate the first stent. Again after 1 month, the operator tried to perform another stenting to eliminate the gradient of the first stent.

### INDICATION OF INTERVENTION

This time, the operator used a 20 × 40 mm CP covered stent, mounted on a 20 × 45mm balloon, but again the first stent was not inflated sufficiently and a gradient of 60 mm Hg persisted at the site of the coarctation. After all these procedures, the patient was referred to our center with this clinical history and hypertension.

### INTERVENTION

We took the patient to the cath lab. First in the pressure study, we detected a 70 mmHg gradient throughout all the stents. We then applied a 20 × 40 mm Atlas balloon, but we were unable to completely inflate the balloon. We, therefore, applied the double-balloon technique. We simultaneously inflated two balloons, 20 × 40 mm and 12 × 40 mm in size respectively. The final result showed that the gradient was decreased to zero.

### LEARNING POINTS OF THE PROCEDURE

Sometimes the double-balloon technique can be applied for undilatable coarctations in adult patients.