

A Sheathless Guiding System Allowing for Transradial Large Caliber Catheter Use



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Background

Transradial angioplasty has been demonstrated to have significant benefits over traditional transfemoral approach, particularly safety due to reduced access site bleeding and patient comfort. Due to the smaller diameter of radial artery, the use of large caliber guiding catheters is limited as it results in increased pain, spasm and radial artery attrition. The development of the Sheathless guiding catheter (Asahi, Japan) with hydrophilic coat, allows for the use of a 6 or 7F equivalent guiding catheter in the coronary artery with access site caliber equivalent to 4 and 5F sheaths. The guiding catheter comes with an exaggerated curve which corrects following introduction of the accompanying dilator. This provides stiffness and facilitates introduction through the skin to the vessel.

Methods

In 50 consecutive cases the sheathless guiding system was used. Following a diagnostic study using 4 or 5F sheath, the sheath is removed on an 0.035" wire the dilator introduced to the guide catheter and the dilator catheter system introduced directly into the skin on the wire with adequate hydration. The dilator is removed in the ascending aorta and the guide positioned as usual. After a 4F sheath, either a 6.5 or 7.5 Sheathless catheter was used. If a 5F diagnostic sheath was used a 7.5F system was deployed.



Results

•Patients 50 (36 male)

•Failures 0

•Vessels 23 LAD

19 Cx

16 RCA

2 SVGs

1 LM

2 renals

•Stent lengths 12-30mm

•Stent diameters 2.5-5.5mm

•CTO 3

•Kissing Balloons 9

•Primary for AMI 12

•2B3A inhibitors 13

•Guiding curves

•Judkins L 3.5- 7

•Judkins L 4 - 7

•Judkins R 4 - 14

•Judkins R 3.5 - 3

•Power Backup 3.5 - 10

•Power Backup 4 - 2

•Special Curve - 1

•Amplatz L 0.75 - 6

•Additional hardware used:

Cutting Balloons

Tomus

Twinpass catheters

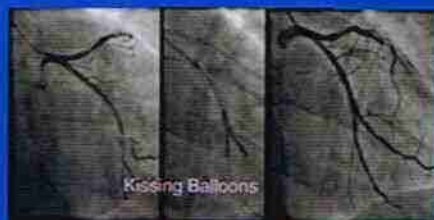
IVUS

Gooseneck snare

EZ Filter wire

Pronto Aspiration

Catheter



Conclusions

The sheathless guiding catheter system is feasible and safe allowing for the use of large caliber guiding catheter from the radial artery, providing almost unrestricted use of this approach even in the most complex lesions and smallest patients.