

Innovative braiding technique and bifurcation stents with a seamless transition area

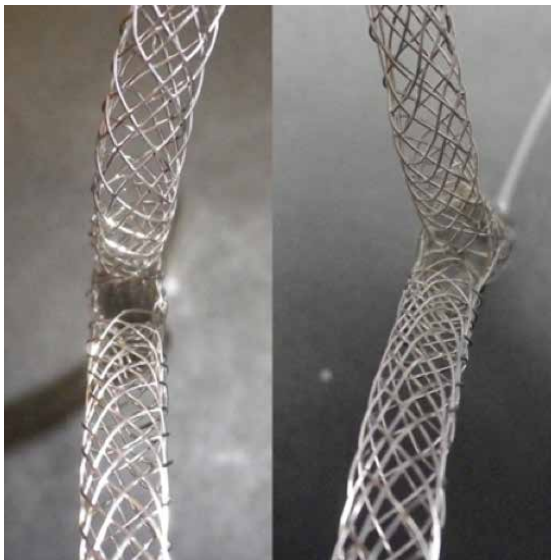
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CHALLENGE

In Germany alone more than 300'000 patients receive a stent therapy for coronary diseases. Stent placement at vessel bifurcation sites is technically challenging and currently involves the assembly of separate stent segments. This can result in reduced density or even holes at the transition area, which increase the risk for re-stenosis. Another approach for bifurcation stents are one-piece stents, which can be braided or woven, but also do not provide optimal stability.

INNOVATION

The innovative braiding technique developed at the University of Applied Sciences Hof allows for simultaneous production of two or more strands to create tailored stents with maximum flexibility and stability and a seamless transition area with a homogenous density. The technique can be applied to a variety of materials such as Nitinol and is ideally suited for the production of bifurcation stents.



Stent with a hole in the transition area (left side) and optimized stent with a seamless transition area (right side)

- ✓ Innovative braiding technique
- ✓ Applicable to a variety of stent materials
- ✓ Maximum stability and flexibility
- ✓ Simultaneous production of secondary branches

COMMERCIAL OPPORTUNITIES

Optimized braiding technique for bifurcation stents with a seamless transition area

DEVELOPMENT STATUS

Searching for a licensing partner