Three juxta renal parallel grafts is not too many

FOR

Frans Moll
Why do we ask this question?

- bail out?
- standard procedure?

Answer:
To bail out in complicated cases, but also durable enough for > 5 year F.U.
Informed Consent

What to tell your patients and their family?

• Reliability of devices
  - approved “off the shelf”

• Results in peer reviewed publications?
  - yes
Collected World Experience About the Performance of the Snorkel/Chimney Endovascular Technique in the Treatment of Complex Aortic Pathologies

The PERICLES Registry

Konstantinos P. Donas, MD,* Jason T. Lee, MD, †, Mario Lachat, MD, †, Giovanni Torsello, MD, PhD,§ and Frank J. Veith, MD; on behalf of the PERICLES investigators

Conclusions: This global experience represents the largest series in the ch-reports of branched/fenestrated devices, suggesting the appropriateness of broader applicability and the need for continued careful surveillance. These results support ch-EVAR as a valid off-the-shelf and immediately available alternative in the treatment of complex abdominal EVAR and provide impetus for the standardization of these techniques in the future.
Chimney Grafts in Aortic Stent Grafting: Hazardous or Useful Technique? Systematic Review of Current Data

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Department of Vascular Diseases, Skåne University Hospital, Malmö, Sweden

Conclusion: Increasing amounts of data support the benefit of visceral and arch chimney graft techniques. In particular, the low early mortality and complication rates and high long-term patency seem advantageous; however, the majority of cases have been treated electively, and there is a high risk of bias in all studies. Mid-to long-term data suggest few late complications, except in cases where one renal artery was sacrificed. The CG technique is valuable for complex urgent patients and needs further documentation for other patient groups.
The PROTAGORAS study to evaluate the performance of the Endurant stent graft for patients with pararenal pathologic processes treated by the chimney/snorkel endovascular technique

Konstantinos P. Donas, MD,a,b Giovanni B. Torsello, MD,a,b Gianluca Piccoli, MD,c Georgios A. Pitoulias, MD,a,b,d Giovanni Federico Torsello, MD,e Theodosios Biswas, MD,a,b Martin Austermann, MD,a,b and Daniele Gasparini, MD,e Münster, Germany; Udine, Italy; and Thessaloniki, Greece

Conclusions: Standard use of the Endurant abdominal device for ch-EVAR in >120 patients is associated with high technical success, significant aneurysm sac regression, and low incidence of secondary procedures after 2-year radiologic follow-up. These results will give significant impetus to device selection, facilitating the standardization of technique.
Chimney: 4 chimneys?
Chimney: 2 x 2 chimneys?
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Most patients received one or two chimney grafts, whereas success was 86%, and a patency rate of 97.8% was obtained. Currently gaining more popularity.

Because of good midterm results, these techniques are treated aortic side branches. The outcome of chimney grafts, reported 93 patients with avoiding open surgery.

Achieved with the use of immediately available stents, grafts, an extension of the proximal landing zone can be calci for these stent grafts because of tortuosity, angulation, or over, 20% to 30% of patients are considered unsuitable are patient specific.

Important limitation regarding these stent grafts is that they are patient specific and have to be custom made. More, fenestrated and branched stent grafts were introduced as repair, physicians have sought to extent its applicability. Dissection and have to be custom made.

With the use of chimney techniques, the results and its applicability might be improved. Chimney grafts seems feasible, and with developing techniques, the results and its applicability might be improved.

In this report, technical complications of the aorta.

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