

3D stereoscopic visualization in the evaluation of fenestrated endovascular repair of abdominal aortic aneurysms

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Abstract

Purpose: The purpose of the study was to explore the application of 3D stereoscopic visualization in the evaluation of patients with abdominal aortic aneurysm treated with fenestrated endovascular grafts.

Content organization

- A. Types of aortic aneurysms and aortic stent grafts
- B. Fenestrated stent grafting and its types of treatment
- C. Diagnostic imaging for follow-up of fenestrated stent grafts (CT)
- D. Conventional 2D and 3D CT imaging reconstructions
- E. Generation of 3D stereoscopic visualization
- F. 3D stereoscopic visualization in comparison to 2D/3D CT visualizations for assessment of fenestrated stent graft repair of abdominal aortic aneurysms

Conclusion (and teaching points)

3D stereoscopic visualization enhances the endovascular specialists' ability to accurately evaluate the treatment outcomes of fenestrated repair of abdominal aortic aneurysms. This exhibits reviews:

- a. Fenestrated stent graft repair of aortic aneurysms;
- b. Potential value of 3D stereoscopic views for the assessment of treatment outcomes of fenestrated repair in comparison to conventional 2D/3D CT imaging.