CONTRAST ENHANCED ULTRASOUND (CEUS) TO FACILITATE TREATMENT OF TYPE 2 ENDOLEAK

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DISCLOSURE

• No financial disclosures
• Off-label use of ultrasound contrast (Lumason® Bracco)

TYPE 2 ENDOLEAK FACTS

• Type 2 endoleaks occur in 30 to 50% of EVAR patients
• Current guidelines suggest treatment based on size, expansion (5mm) and symptoms
• Clinical success of sac embolization in 68% (57% to 77%)

Ultee et al. Eur J Vasc Endovasc Surg

71M post FEVAR with T2E from IMA and lumbar arteries

Supine position for transarterial approach

First CEUS: post IMA embolization
Right lateral decubitus for translumbar approach

Immediate CEUS assessment

Second CEUS: post direct sac embolization

74M post FEVAR with T2E from multiple lumbar arteries
18 patients had intraoperative contrast enhanced ultrasound

- No endoleak: 11 (61%)
- Persistent endoleak: 7 (39%)

No aneurysm enlargement
- 1/12 small persistent endoleak: 8%

No additional Rx
- 3

2nd Embolization
- 4

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CONCLUSION

• Intraoperative CEUS identify patients with persistent endoleaks
• Immediate sac embolization of persistent endoleaks may decrease rates of reinterventions
• Larger clinical experience and longer follow up is needed