

Drug-Eluting Bead Chemoembolization

My Top 5 Technical Pearls

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Disclosures

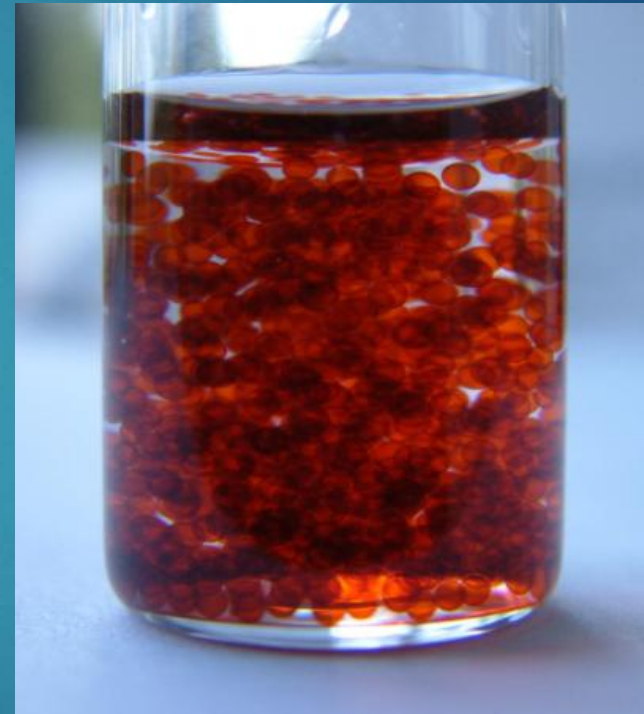
Consultant - Angiodynamics, Incyte, Guerbet

My presentation will discuss the off-label use of drug eluting beads

Brand names are included in this presentation for participant clarification purposes only. No product promotion should be inferred.

Drug-Eluting Beads

- ▶ Soft, deformable microspheres loaded with doxorubicin, slowly degradable
- ▶ Reduce blood flow to tumor
- ▶ Slow release of doxorubicin — enhanced local antitumor effect and decreased systemic exposure



Choice of Embolics

- LC/Dc Beads
- Oncozene Tandem
- Quadrasphere/Hepasphere
- Life Pearl

Off-Label Use

▶ HCC

▶ Cholangiocarcinoma

▶ mCRC

5 Technical Pearls

- ▶ Technique
- ▶ Dose
- ▶ Patient selection
- ▶ Follow-up
- ▶ Advances

TECHNIQUE

Transcatheter Treatment of Hepatocellular Carcinoma with Doxorubicin-loaded DC Bead (DEBDOX): Technical Recommendations

**Riccardo Lencioni • Thierry de Baere • Marta Burrel • James G. Caridi •
Johannes Lammer • Katerina Malagari • Robert C. G. Martin • Elizabeth O'Grady •
Maria Isabel Real • Thomas J. Vogl • Anthony Watkinson • Jean-Francois H. Geschwind**

Technique — Do's

- ▶ Discard supernatant
- ▶ Cone-beam CT
- ▶ Microcatheters
- ▶ Inject slowly
- ▶ Watch for reflux
- ▶ Avoid non-target embolization

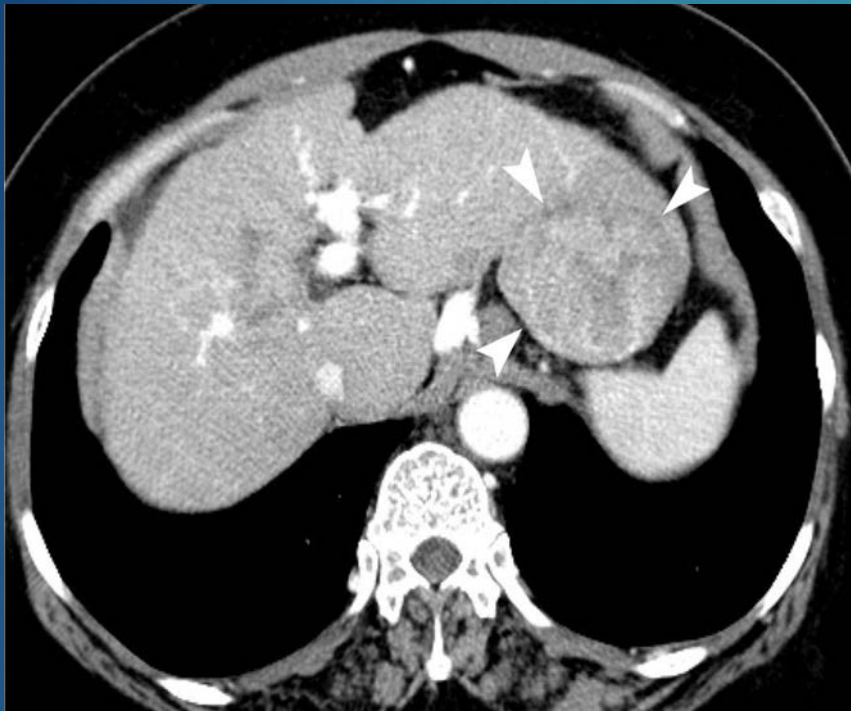
Do Not

- ▶ Overagitate the beads
- ▶ Use bland embolic to go to stasis
- ▶ Use regular 4 Fr catheters
- ▶ Dilute with ionic contrast or NS

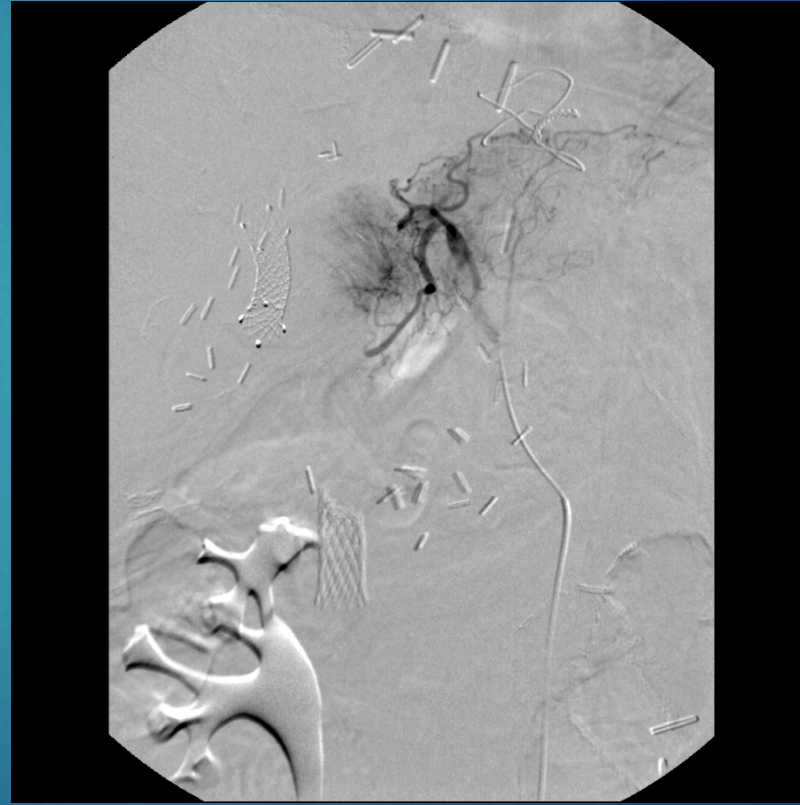
Look for

- ▶ Aberrant vessels
- ▶ Additional lesions
- ▶ Confirm portal vein patency
- ▶ Assess for shunting

HCC Fed by Left Phrenic Artery



Supply from Right Phrenic



Dose

► DEBDOX

- 1 vial with 75 mgs of Doxorubicin – Under Milan
- 2 vials with 75 mgs of Doxorubicin in each vial – Over Milan

► DEBIRI

- 1 vial of beads in 100 mgs of Irinotecan

Patient Selection

Follow-Up Assessment

- ▶ Triple-phase CT

- ▶ MRI

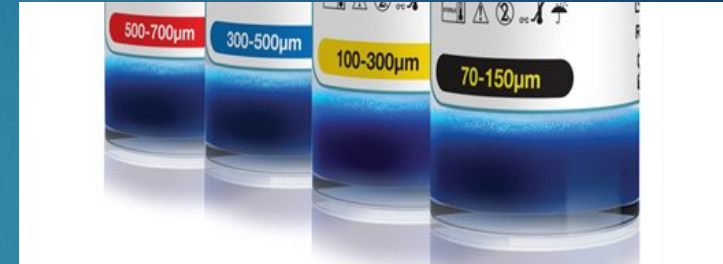
Follow-Up

- ▶ CT or MRI at
- ▶ 1-, 3-, 6-, 12-month intervals



Advances

- ▶ Trend toward smaller beads



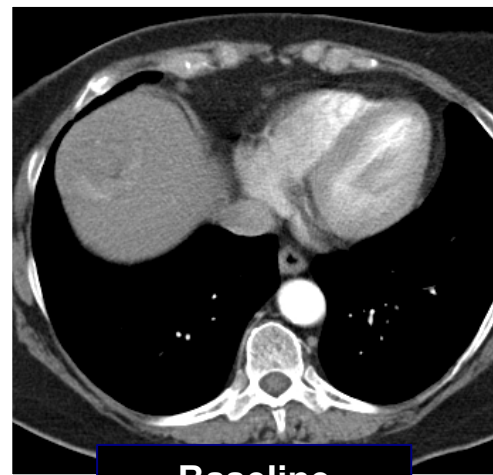
- ▶ Radiopaque beads

- ▶ Resorbable beads

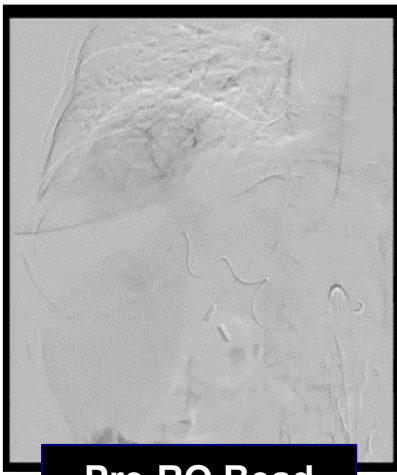
Advantages of RO Beads

- ▶ Visualization during the procedure
- ▶ Ability to assess areas of residual enhancement
- ▶ Anecdotal – less product and same-day discharge

Lumi: Case Example



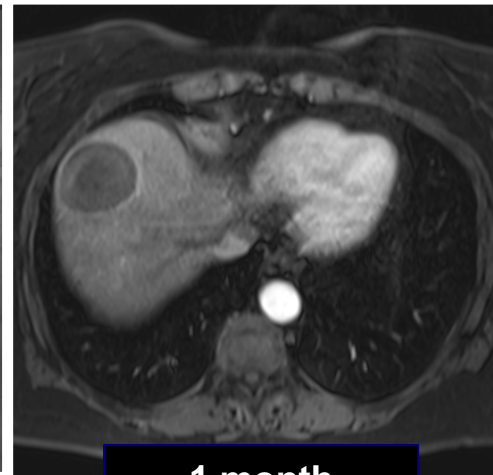
Baseline



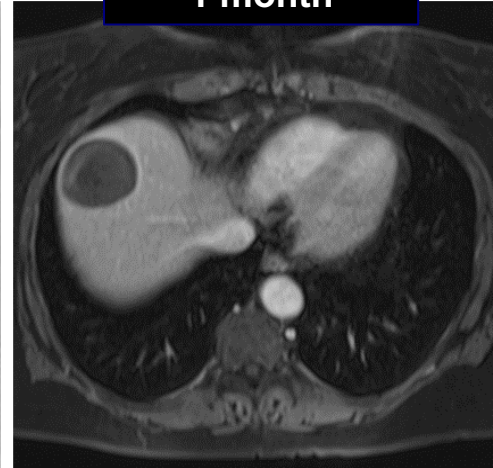
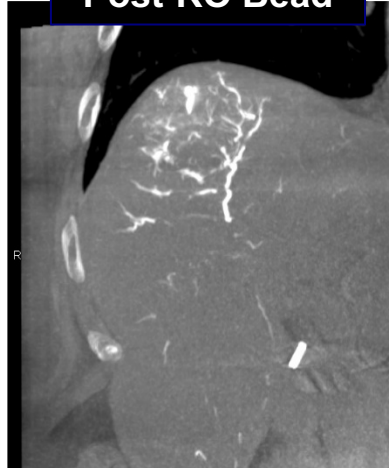
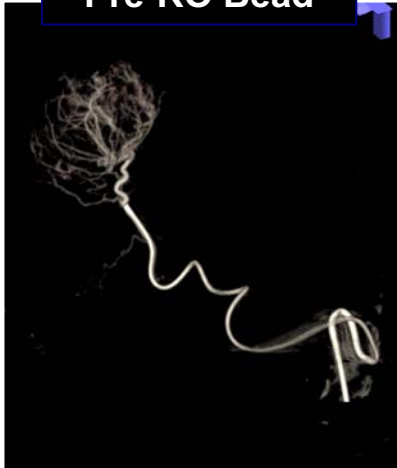
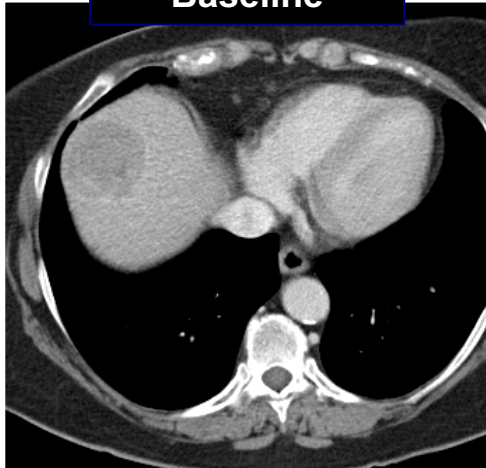
Pre-RO Bead



Post-RO Bead



1 month



THANK YOU

