Case Report
Minimally Invasive Treatment of a Benign Proximal Humeral Cyst with CERAMENT™ BONE VOID FILLER: 5 month follow-up

Joseph Benevenia, M.D.
Rutgers University Hospital, Newark, NJ, USA
MINIMALLY INVASIVE TREATMENT OF A BENIGN PROXIMAL HUMERAL CYST

DIAGNOSIS
- Large benign proximal humeral cyst with thinning of proximal cortices (Fig. 1).

TREATMENT
- The cyst was aspirated using a large-bore needle. The needle was placed in the proximal-most extent of the cyst. The needle was exchanged for a cannula for pressure relief during injection of CERAMENT™ BONE VOID FILLER (Fig. 2, 3).
- An additional cannula was placed into the distal-most extent of the cyst. The CERAMENT™ BONE VOID FILLER delivery syringe was attached to the end of the distal cannula and injected one minute after mixing to ensure complete fill of the void via a bottom-to-top (distal to proximal) technique.
- 30cc of CERAMENT™ BONE VOID FILLER was injected. Iohexol provides visibility of product under fluoroscopy (Fig. 3, 4).

OUTCOME
- No complications reported.
- 6 week X-ray demonstrates a white ‘halo effect’ outlining the cyst (Fig. 5). At 3 months, early bone remodeling is seen, along with a ‘puddling effect’ at bottom of cyst (Fig. 6).
- 5 month X-ray shows on-going replacement of CERAMENT™ BONE VOID FILLER with new cancellous bone (Fig. 7).

Images reprinted with kind permission of Joseph Benevenia, M.D.