

## 11412 - Porous Tantalum Reconstruction In Periacetabular Metastatic Bone Disease

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**Background:** Acetabular reconstruction of periacetabular metastatic bone disease tumors is challenging especially in the setting of large bone defects and prior history of local radiotherapy. Extended survival expectancy in patients with metastatic disease has inspired our group to seek for a more durable and predictable reconstruction. Given the low failure rates of porous tantalum acetabular implants in other conditions such as large bone defects and irradiated bone, we have developed a technic to treat these patients utilizing these implants.

**Patients and Methods:** Sixty two consecutive patients (33 women) with periacetabular metastatic bone disease were retrospectively analyzed from 2001 to 2014. All patients were treated with our previously described technic. The median age was 63 years (range, 22–84 years). The majority of the patients had either carcinoma (30 patients) or myeloma (20 patients). The mean follow-up up was 30 months (range 2-99 months). We assessed for progressive radiolucent lines and component migration on follow-up radiographs, complications and overall survival of the patients using Kaplan-Meier estimate.

**Results:** We observed 6 cases with periacetabular radiolucent lines at last follow-up. In three cases, radiolucent lines slightly progressed throughout time without affecting the stability of the construct. One patient was revised due to instability. Most common complications include, 5 superficial infections, 3 deep vein thrombosis, 3 acetabular fracture and 2 deep infections. Fifty percent of the patients were still alive at 3 years of follow-up.

**Conclusion:** Our experience has made tantalum reconstruction our chosen method for managing major periacetabular neoplastic bone loss. A durable and predictable reconstruction is required because of improved survival in patients with metastatic bone disease.