Arthroscopic Osteochondral Allograft Transplantation for Focal Grade 4 Acetabular Chondromalacia

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INTRODUCTION
Symptomatic full-thickness chondral defects in the hip present a unique challenge for hip arthroscopists. Cartilage restoration procedures have been studied predominantly in the knee but extrapolated to the hip for patients without osteoarthritis. A novel technique to treat these grade 4 acetabular lesions includes an arthroscopic osteochondral transplant.

AIM
To determine the effectiveness of osteochondral allograft transplantation for focal grade 4 acetabular chondromalacia.

METHODS
- 44 year old male with focal grade 4 chondromalacia in the acetabular Zone 2.
- Labral reconstruction, acetabuloplasty, and Osteochondroplasty were performed.
- The lesion was prepared with open curettes.
- Limited microfracture was performed with a 0.9 mm curved drill.
- Defect was measured, a 1.4mm PEEK suture anchor was placed in the center of the defect to position the graft.
- A fresh osteochondral allograft was trimmed to fit the defect.
- The graft was delivered over the suture limb with a knot pusher.
- Fibrin glue was applied to the base and edges of the defect and a Foley catheter was insufflated to provide gentle pressure across the graft.
- Patient had restricted weight bearing for 6 weeks to allow for graft healing.
- Patient reported outcomes, including VAS, IHOT, and mHHS were obtained.

RESULTS
Improvements in VAS, IHOT, and mHHS were seen at 6 months and 1 year from preoperative outcome scores. No complications were identified. An MRI of the hip at 1 year showed good fill of the chondral defect.

CONCLUSIONS
Osteochondral allograft transplantation is a novel and valuable technique for managing large symptomatic grade 4 chondromalacia in the acetabulum. Further studies are required to elucidate the long-term results of this procedure alone and compared to microfracture.

ACKNOWLEDGEMENTS
- The Centers for Advanced Orthopaedics
- ISHA

REFERENCES

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