



The Centers
for Advanced Orthopaedics

Arthroscopic Osteochondral Allograft Transplantation for Focal Grade 4 Acetabular Chondromalacia



THE HIP PRESERVATION PROGRAM



School of Medicine
& Health Sciences

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INTRODUCTION

Symptomatic full-thickness chondral defects in the hip present a unique challenge for hip arthroscopists.¹⁻³ Cartilage restoration procedures have been studied predominantly in the knee but extrapolated to the hip for patients without osteoarthritis.¹⁻³ 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.

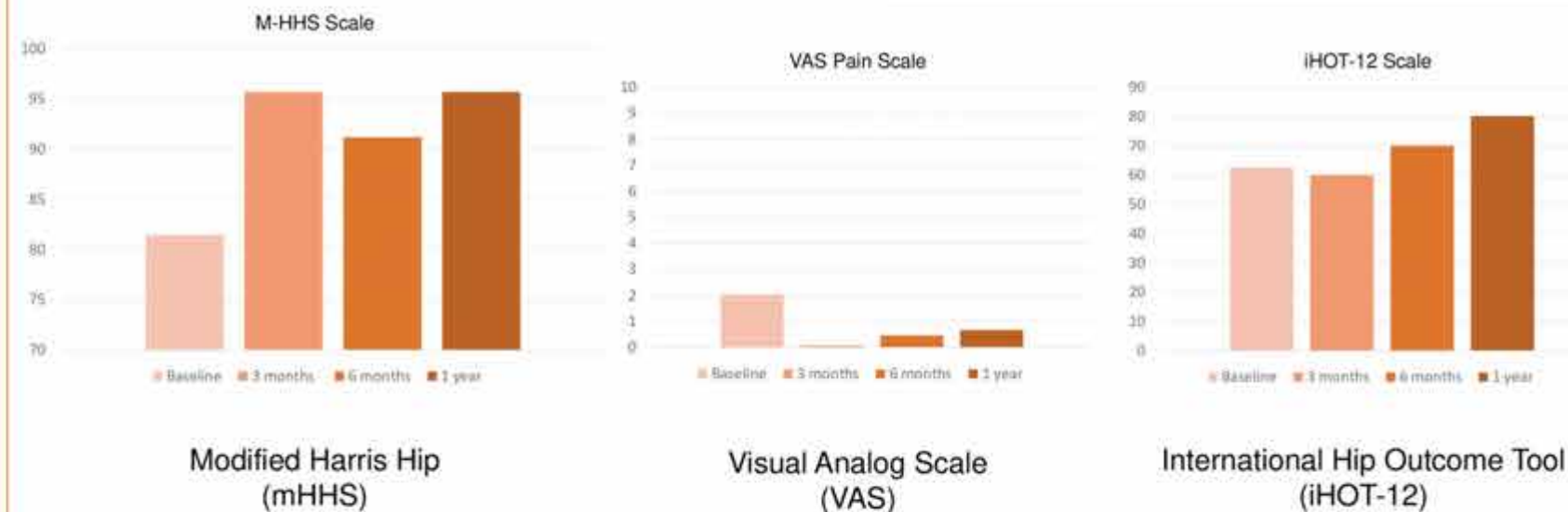
METHODS

- 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.

	VAS Scale	iHOT-12	M-HHS
Baseline	2.03	62.56	81.4
3 months	.06	60.0	95.7
6 months	.46	70.0	91
1 year	.66	80.19	95.7



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

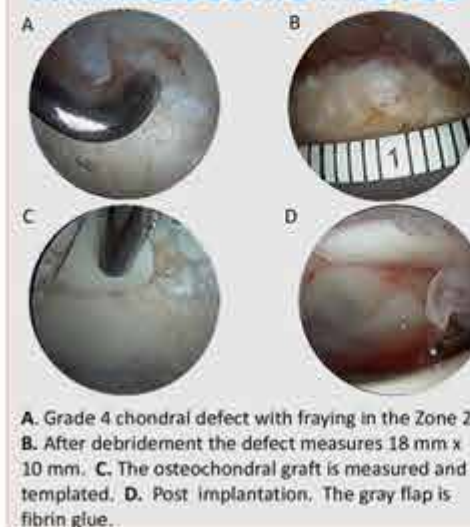
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PRE-OP MRI



ARTHROSCOPIC PHOTOS



POST-OP MRI



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