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GME Research Days 2024

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Conservative Management of Medial Femoral Condyle Osteochondritis Dissecans in the Pediatric Knee

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Morey, Kennedy J.; Harvey, Brian; Adams, Kennison; Domingo-Johnson, EL; Vanderpool, Angie; Stork, Natalie; Pacicca, Donna; Lee, Brian; and Latz, Kevin, "Conservative Management of Medial Femoral Condyle Osteochondritis Dissecans in the Pediatric Knee" (2024). *Research Days*. 5. https://scholarlyexchange.childrensmercy.org/researchdays/GME_Research_Days_2024/ResearchDay2/5

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Conservative Management of Medial Femoral Condyle Osteochondritis Dissecans in the Pediatric Knee Kennedy J. Morey, BS, ATC; Brian S. Harvey, DO, MHPE; Kennison Adams, BS; EL Domingo-Johnson, MD; Angie Vanderpool, APRN; Natalie Stork,

Background

- OCD (osteochondritis dissecans) is osteonecrosis of subchondral bone that affe active pediatric knees, most common at the medial femoral condyle (MFC) of the knee
- Limited data exists on which conservative management method is the best
- Our study aims to determine the role of kne ranger brace, cylinder cast, or activity modification in treating juvenile OCDs

Methods

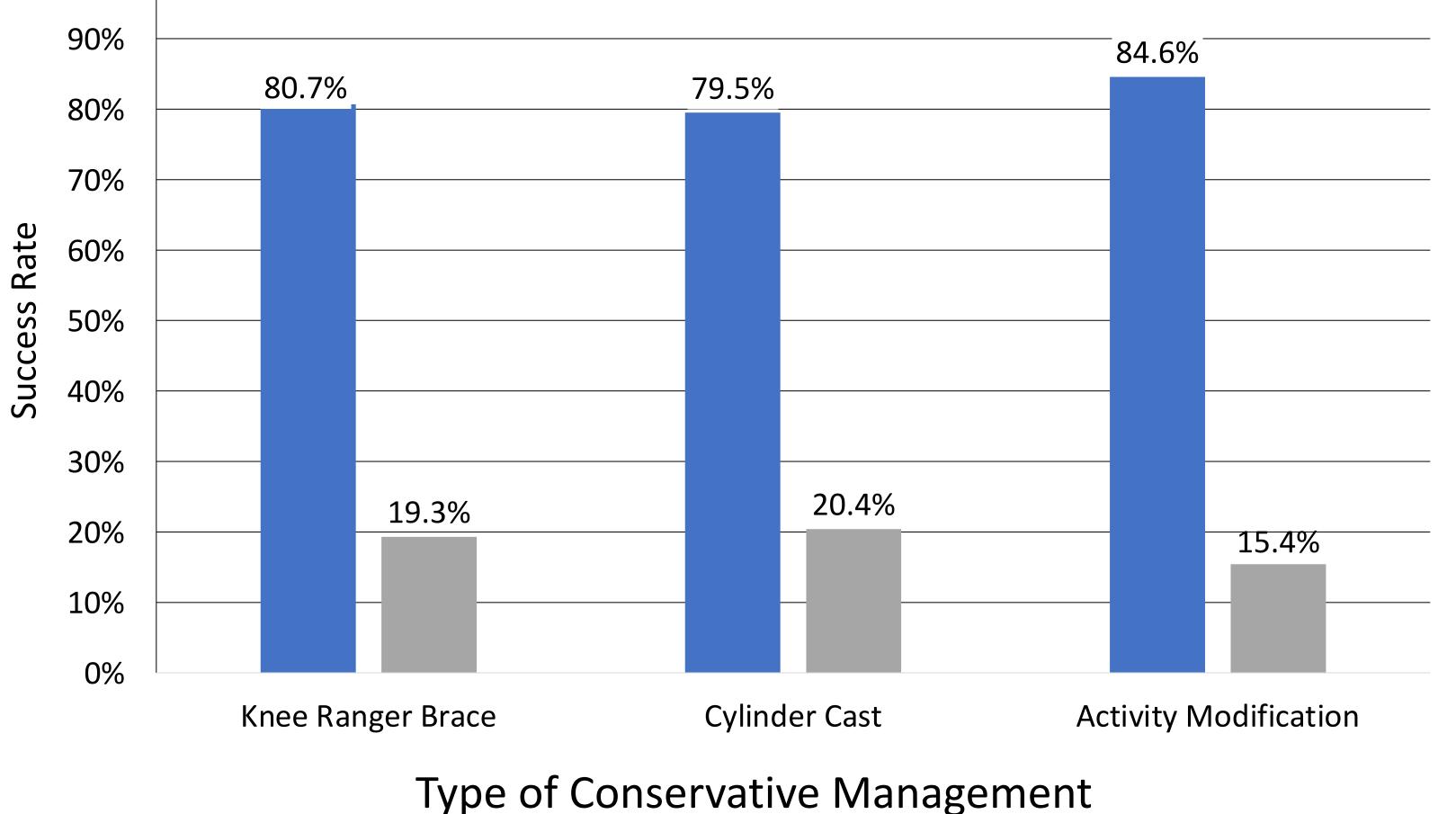
- Retrospective analysis of internal OCD regist
- Demographic, radiographic data, weight bea status, physical therapy participation, and progression to surgery were analyzed
- Treatment effectiveness was determined based on radiographic healing, symptom resolution, and return to activity/sport with failure of conservative management defined as progression to surgery



MD; Donna Pacicca, MD; Brian Lee, PhD; Kevin Latz, MD

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		Demo	graphics		
		Subjects (N=168)			
		Age at presentation median [IQR]			
				11 [10, 12]	
fects		Sex n (%)			
		Female		58 (34.5%)	
ne		Male		110 (65.5%)	
		Race			
)		African American or Black		30 (17.9%)	
		Asian		4 (2.4%)	
		Hispanic		5 (3.0%)	
		White		121 (72.0%)	
		Multiracial		7 (4.2%)	
		Other		1 (0.6%)	
		BMI at presentation median [IQR]			
nee	18.8 [17.0, 22.5] (Sports Participation n (%)				
		No		20 (11.9%)	
		Yes		129 (76.8%)	
		Unknown		19 (11.3%)	
		Treatment			
		Knee Ranger Brace		62 (36.9%)	
		Cylinder Cast		54 (32.1%)	
		Activity Modification		52 (31.0%)	
	Conservative Management Outcomes of MFC OCD			NFC OCD	
stry	100%				
	90%			84.6%	
aring	80%	80.7%	79.5%		
	OU70				



Returned to Activity/Sports

Progressed to Surgery

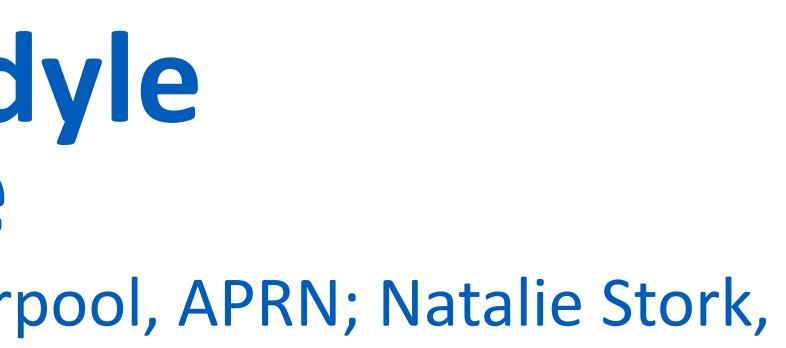


- 148 patient with 168 lesions identified Median age at presentation 11y/o
- 65.5% male, 34.5% female
- **Conservative management success rate was** 80.7% for the knee ranger group, 79.5% of the cylinder cast group, and 84.6% of the activity modification group
- Average time in PT was 6 weeks for the knee ranger and cast groups and 9 weeks for activity modification
- Most patients were able to return to sport by 6mo, regardless of conservative management modality

Conclusions

- MFC OCD lesions of the knee can be appropriately treated with the use of knee ranger brace, cast, or activity modification with similar outcomes.
- of MFC OCD lesions.





Results

- We believe this study will provide practical
- evidence regarding conservative management

