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Self-Rated Pain Tolerance in Hip Arthroscopy Patients – If Someone Tells You They Have a High Pain Tolerance, They Probably Don't

Erin Orozco MD; Miriam Hinojosa; Karen Hernandez; Joshua D. Harris MD
Houston Methodist Hospital, USA



Faculty Disclosure Information

- AAOS: Board or committee member
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BACKGROUND

- Previous studies have attempted to determine if self-rated pain tolerance correlates with true pain tolerance.¹⁻³
- Limited data exists to quantify the subjective pain tolerance levels in hip arthroscopy patients.
- Many patients report that they “have a high pain tolerance”
- Though one would assume objective quantitative pain tolerance to be distributed normally across a sample, we hypothesize that the Lake Wobegon and Dunning-Kruger cognitive biases⁴ will cause patients to overestimate their own pain tolerance, resulting in the mean subjective pain tolerance significantly above the median.



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PURPOSE

- Quantify self-rated pain tolerance among non-arthritic patients that underwent hip arthroscopy
- Determine if differences exist in self-rated pain tolerance between different sexes or age groups



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METHODS

- Retrospective case series
- Inclusion criteria: patients undergoing primary hip arthroscopy by single surgeon; above age 18; completed questions regarding self-reported pain tolerance on new patient questionnaires
- Exclusion criteria: previous hip arthroscopy; did not complete new patient questionnaire; underwent concomitant sports hernia repair, hamstring, repair, or gluteal tendon repair
- Percentage of patients who reported themselves having a “high” pain tolerance was calculated
- Data stratified by age, sex, opioid use, and allergies
- Linear regression analysis to evaluate for significance



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RESULTS

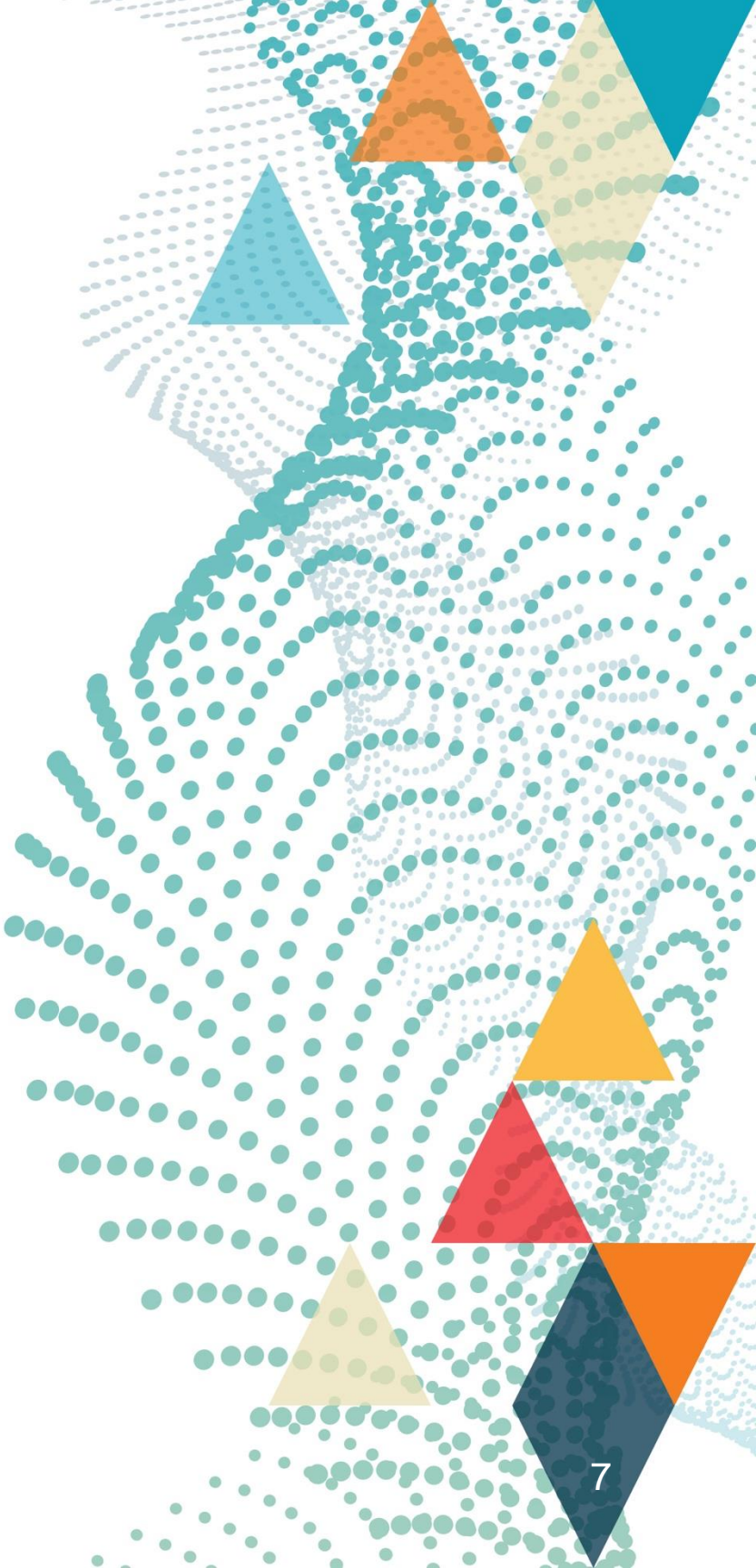
Age Group (years)		Allergies		Prior Opioid Use (Y/N)		Sex (M/F)	
<20	8	0	94	Yes	101	Male	66
20-29	53	1	39	No	104	Female	139
30-39	55	2	23	Total	205	Total	205
40-49	58	3	10				
50-59	26	4+	39				
≥60	5	Total	205				
Total	205						

Table 1. Demographic data

RESULTS

Age (years)		Allergies		Prior Opioid Use (Y/N)	
<20	75.0%	Yes	87.4%	Yes	89.1%
20-29	83.0%	No	88.3%	No	86.5%
30-39	96.4%	Significance (F)	0.84	Significance (F)	0.44
40-49	86.2%	Sex (M/F)			
50-50	84.6%	Male	93.9%		
≥60	80.0%	Female	84.9%		
Significance (F)	0.71	Significance (F)	0.84		

Table 2. Subjects with High Self-Rated Pain Tolerance (%)



RESULTS

- 205 patients included (139 female, 66 male)
- 88% of patients self-reported a high pain tolerance
- Men reported high pain tolerance more than women
- The 30–39-year-old group had the highest percentage of high self-reported pain tolerance, while <20-year-old group reported lowest percentage
- 89% of patients with prior opioid use endorsed a high pain tolerance
- 87% of patients with allergies endorsed a high pain tolerance.
- No differences between any groups were found to be statistically significant



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FUTURE ACTIONS

- Self-rated pain assessments may not be entirely reliable as a true indicator of pain tolerance
- Providers should consider individual factors and the many ways in which these factors interact with one another when planning postoperative pain management.



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