Patient Knowledge of and Willingness to Pay for Platelet-Rich Plasma Injections: A Prospective Survey Study on Orthopedic Sports Medicine Patients

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Disclosures

- One or more authors have something to disclose.
- Alexis Colvin, MD: consultant for US Tennis Association, Midtown Surgery Center

Introduction

- The efficacy of platelet-rich plasma (PRP) injections for sports-related injuries is unclear with some studies finding that patients benefit from its use and other studies finding no benefit.[1]
- PRP is a cash-pay procedure that is usually not covered by insurance,[2] and it is actively advertised for a number of different indications, some without supporting evidence.[3] Yet, an increasing number of patients are asking their physicians for PRP injections.[4]
- The aim of this study is to better understand patients' knowledge of PRP and willingness to pay out of pocket.

Methods

Design: Prospective Survey Study

- This IRB-approved study (IRB 21-01641) included patients presenting with a new chief complaint at a sports medicine orthopedic office in a large urban academic health system.
- Patients completed an anonymous survey prior to evaluation by an orthopedic surgeon
- The survey collected demographic information, clinical information, knowledge of PRP, willingness to pay for PRP based on expected percentage pain reduction, and motivators behind willingness to pay.

Cohorts: 1) Patients who had heard of PRP, 2) Patients who had not

- Patients who had not heard of PRP were given a short educational excerpt on PRP

Statistical analysis

- Two-tailed Mann-Whitney U and Kruskal-Wallis tests evaluated pain scores and willingness to pay for PRP between the cohorts.
- Spearman rank correlation tests evaluated correlations between household income and willingness to pay.

Results

- To date, we have enrolled 32 patients of which 37.5% had previous orthopedic surgery, 43.75% had seen another medical provider for their current symptoms and 37.5% had previously heard of PRP.
- Patients who had heard of PRP (versus those that had not) reported lower median pain scores (median 4.75 versus 5.0 out of 10), the same hindrance of daily activities (median 3.0 out of 5), and longer duration of symptoms (median 5.0 months versus 1.0 month), although not statistically significant.
- There was no correlation between patients' income and willingness to pay.

Results

- Patients who had heard of PRP were willing to pay more for PRP (median $500 versus $200) although not statistically significant.
- Patients were willing to pay more for a greater anticipated reduction in pain: median of $50, $250, and $500 for 25%, 50% and 100% reduction in pain, respectively (p = 0.001).

Table 1: Willingness & Motivation to Pay

Willingness to Pay For PRP		
Item	Median (IQR)	p-value
Patients who **have heard** of PRP - willingness to pay (N=10)	$500 ($200 - $1,000)	0.235
Patients who **have not heard** of PRP - willingness to pay after short excerpt (N=14)	$200 ($62 - $875)	
Willingness to Pay For % Reduction in Pain		
Item	Median (IQR)	p-value
25% Reduction (N=25)	$50 ($0 - $200)	**0.001**
50% Reduction (N=25)	$250 ($50 - $500)	
100% Reduction (N=26)	$500 ($112 - $1,000)	
Motivators to Pay		
Ordered frequency of primary motivators for willingness to pay for PRP based on **% reduction in pain**, all respondents (N=27)	#1: Symptoms affecting day-to-day life #2: Desire to try non-surgical intervention #3: Desire to return to normal activity as soon as possible #4: Other motivator (tied) #4: Affordability (tied)	-
Ordered frequency of primary motivators for willingness to pay **after being informed about PRP** (only respondents who have not previously heard about PRP) (N=16)	#1: Physician trust (tied) #1: Symptoms affecting day-to-day life (tied) #3: Desire to return to normal activity as soon as possible and Other Motivator #4: Desire to try non-surgical intervention and Affordability	

Results

- Regarding willingness to pay for a given percent reduction in pain, patients reported their top three motivators to be symptoms affecting their day-to-day life, desire to try non-surgical interventions, and desire to return to normal activity.
- Patients who had not heard of PRP reported physician trust as the greatest motivator behind their willingness to pay.

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Conclusion

- This ongoing study demonstrates the correlation between willingness to pay and perceived effectiveness of PRP while also noting motivators to pay.
- There may be some differences between patients who had heard of PRP versus those that had not.
- These data may be further refined with ongoing enrollment and will provide important insights into patients' knowledge and how this impacts decision-making in the context of PRP injections.

References

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Thank You!

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