

"Clinical Outcomes with Meniscal Repair, Between 2019-2020, Viña del Mar, Chile (Preliminary Study)"

- <u>S. González Rouse</u> MD, MSc, MBA.
- R. Roz Romano MD, MSc.
- H. Carvajal Araya MD, MSc.













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Introduction

Meniscal injuries are the most common pathologies in the knee, with degenerative and traumatic causes being the most frequent causes¹. It has been shown that a partial meniscectomy or a total meniscectomy will increase the degenerative changes in the articular cartilage of the knee, unlike a meniscal repair, which would leave the meniscus at the same level as before the injury ².





Arthroscopic repair techniques can be divided into four categories: 1.- outsidein, 2.- inside-out, 3.- all-in, and 4.-hybrid (combined) according to the location of the injury ^{3,4,5,6,11,12}.











Objectives

 To analyze the preliminary results of clinical outcomes obtained in patients operated on with arthroscopic meniscal repair all inside, outside inside and mixed, in 3 clinical centers in the city of Viña del Mar, Chile, between 2019 and 2020, using a validated form, comparing the preoperative and postoperative.





Material and Methods

- Primary, descriptive and prospective study of patients operated on for isolated suturable meniscal tears, using the all-in arthroscopic technique (Fast Fix 360 device) and/or outside-in (Ultrabraid highstrength suture), performed by 2 surgeons, standardized technique, since January 1, 2019 to December 31, 2020, and with at least 1 year of follow-up.
- A non-probabilistic sampling was carried out and it was analyzed using Excel 365. The patients were evaluated by the validated form "Knee Injury and Osteoarthritis Outcome Score" (KOOS) in the preoperative and postoperative periods.







Results tables

KOOS questionnaire application

Satisfaction degree

Preor

KOOS (overall average)	Preoperative	Postoperative	Degree of satisfaction
Symptoms	47,5	94,2	
Pain	34,8	89,8	Excellent (91-100)
DLA (Daily life activities)	45,5	93,4	
QL (Quality of life)	14,7	81,1	Good (81-90)
SRA(Sports and Recreation Activities)	24,4	79,5	Regular (51-80)
Average	33,4	87,6	
Degree of satisfaction	POOR	GOOD	Poor (0-50)



Preoperative	Postoperative
0% (0)	51,6% (15)
0% (0)	32,2% (10)
9,7% (3)	16,2% (5)
82,4% (28)	0% (0)



Results

- Meniscal repair a total of 77 menisci, 33 of them meet the inclusion and exclusion criteria. With an average follow-up of 17.5 months (12 and 36 months), average age 42.2 years, 58.1% male, the internal meniscus was the most repaired 80.6%, all-inside sutures 92.4%, return to work and sports, 2.6 and 3.3 months, respectively.
- Preoperative KOOS score 33.4/100 "Poor", and postoperative KOOS 87.6/100 "Good and Excellent" categorization. Global preoperative KOOS 82.4% in "Poor" categorization, while postoperative KOOS 83.8% in "Good and Excellent" categorization.
- No complications were observed with the surgical technique used.







- The patients presented epidemiological characteristics and results similar to international publications, where they obtained GOOD and EXCELLENT degrees of clinical outcomes in preoperative and postoperative KOOS scores, with a minimum follow-up of 12 months 8,9,10
- Two categories are improved in overall patient satisfaction with meniscal repair. This preliminary study is part of a follow-up project of at least 10 years.





- It is very important to maintain recruitment in the future, and to continue prospectively applying the satisfaction scores ⁷. Likewise, it would allow studying the behavior of meniscal repair in terms of the evolution of cartilage damage, further defining the indication for meniscal suture, and continuing to certify the results obtained to date.
- Therefore, this work today also acquires greater relevance, considering that Chile does not have a similar publication on meniscal repair.







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