



ORTHOPAEDIC DEP.  
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# Comparative Evaluation of Orthobiology Ozonized PRP Platelet Rich Plasma-plus Hyaluronate Injection Therapy post Arthroscopic Suturing of Meniscal Degenerative Tear versus Partial Meniscectomy Treatment of Meniscal Tears in Degenerative Knee OA Follow up Study for 2 years



## PURPOSE AND HYPOTHESIS

Meniscal Tears of Knee joint Osteoarthritis degenerative OA, still some center treated by Arthroscopic Partial Meniscectomy (APM) followed by a physical therapy program lone. The high rate of progressive degenerative knee joint lead to evaluate the Orthobiology Ozonized PRP Platelet Rich Plasma plus Hyaluronate therapeutic treatment post (ASMT) Arthroscopic Suturing of meniscal degenerative tear of knee joint OA.

## PATIENTS AND METHODS

A prospective comparative study 104 patients all presented with knee joint Osteoarthritis Degenerative Tear of Meniscus, were randomized according to inclusion exclusion criteria into two groups. Group A 55 patients receive intra-articular Orthobiology Ozonized PRP Platelet Rich Plasma plus Hyaluronate therapeutic, post (ASMT) Arthroscopic Suturing of meniscal tear treatment of knee joint OA degenerative type, they were presented with meniscal tear on MRI of knee joint, all patients were followed by physical therapy. Compare to group B 49 patients were prepare for Arthroscopic Partial Meniscectomy (APM) followed by a physical therapy. The patients followed up for 12, 24 Months period. The primary outcome measurements were clinical and functional outcomes according to modified Lequesne's and modified WOMAC scores.

## RESULTS

In both group A and B significant reduction in the mean of both modified Lequesne's and Modified WOMAC scores from baseline were seen at all follow up visit for 12, 24 Months. Also there were significant statistical improvements at 12, 24 Months for both Lequesne's and Modified WOMAC scores in group A superior to group B (p-value < 0.0001). There were No severe adverse events related to the method were observed in group A compare to group B were noticed infection, stiffness, wide spread of degenerative OA knee joint.

## CONCLUSIONS

We concluded that intra-articular Orthobiology Ozonized PRP Platelet Rich Plasma plus Hyaluronate therapeutic post (ASMT) Arthroscopic Suturing of meniscal tear of degenerative type knee joint OA, follow by physical therapy are superior to Arthroscopic Partial Meniscectomy (APM), for 2 years follow up.

## PRP-Hyaluronate



| Date/ Follow up     |           | Mean Results WOMAC Score Index<br>Group A/55 |            | Mean Results Lequesne's Score Index<br>Group B/49 |            |
|---------------------|-----------|--|------------|---|------------|
| Groups              |           | Group A/55                                   | Group B/49 | Group A/55  | Group B/49 |
| Pre- Intervention   |           | 36.9   | 34.7       | 14.4  | 13.8       |
| Post- Interventi on | 1 Month   | 22   | 31.6       | 11.8  | 12.6       |
|                     | 3 Months  | 21.1   | 28.9       | 10.3  | 11.8       |
|                     | 6 Months  | 18.6   | 26.8       | 9.6   | 11.2       |
|                     | 12 Months | 16.2   | 24.4       | 8.2   | 10.8       |
|                     | 24 Months | 12.2   | 22.4       | 6.2   | 10.2       |

