

Comparison of Platelet-Rich Plasma versus Radiofrequency Ablation for treatment of Cervicogenic Headache-2 year results.

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Background:

Cervicogenic headache (CH) is a syndrome characterized by unilateral head pain caused by a cervical spine disorder, usually from C1, C2, or C3 origins. Failing conservative management, patients may be candidates for intra-articular/medial branch blocks followed by radiofrequency ablation (RF). Alternatively, platelet-rich plasma (PRP) offers a regenerative treatment option.

Objectives:

There is a paucity of data showing efficacy of PRP in the treatment of cervical facet disease. This study compared the outcome of PRP versus RF in the same patient for treatment of CH.

Methods:

Twelve patients diagnosed with CH initially underwent unilateral injections of C2-3 and C3-4 facet joints using standard guidelines. Nine of the twelve patients had more than 60% improvement in symptoms and underwent RF neurotomy, with lesioning of 85 degrees Celsius for 60 seconds per level, using Nimbus needle. After pain symptoms returned, they were then treated with intra-articular PRP at the same facet joints with 1 ml of PRP injected per joint, using Biomet centrifuge. Percentage of relief, duration of relief, and preferred treatment method were then compared.

Results:

All patients were female with average age of 70.5 years. The average percentage of relief from intra-articular PRP was 91.6%, as compared to 74.4% with RF ($P < 0.001$). The average duration of relief from PRP was 6.8 months, versus 9.9 months with RF ($P < 0.001$). Six of nine patients preferred the PRP treatment. Two of nine patients developed persistent localized posterior neck dysesthesias post RF. None of the PRP patients had any long lasting negative side-effects.

Conclusion:

PRP provided a greater percentage of pain relief, whereas RF provided a longer duration of relief. Majority of patients preferred PRP as the treatment of choice, without any long term negative side-effects. A larger study may help standardize treatment in the future.