

## Dextrose Prolotherapy for Chronic Patellar Tendinopathy

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### INTRODUCTION:

Chronic patellar tendinopathy (CPT) is a debilitating condition leading to disability. Repetitive stress seen in sports or work-related injury (RSI) is a risk factor. CPT can be treated conservatively and dextrose prolotherapy is one of the promising alternatives. It involves injection of hypertonic dextrose solution to stimulate inflammatory cascade and healing process, leading to pain relief.

### REPORT:

FY, 53 years old female living with CPT for 2 years. Working as a healthcare assistant exposed her to RSI. She used NSAIDs and comply with physiotherapy.

5% dextrose was mixed with 8.4% sodium bicarbonate and 3mls were injected into the peritendinous layer at each site.

### Figure 1: Prolotherapy injection site.



Week	Pain score	
	Pre injection	Post injection (30 mins)
0	6	1
2	2	-
4	8	1
6	1	-
8	0	-

Table 1: Pain score at 2 weekly review

Pain score was significantly improved post injection and her work performance improved. At week 4 her pain returned worse suggesting further follow-up needed to determine optimum treatment for long-term benefit.

### DISCUSSION:

Dextrose prolotherapy induce osmotic shock causing local damage and promote healing process.<sup>1</sup>

Morath et al review 10 studies showed weak evidence that prolotherapy is an effective treatment of CPT in comparison to other treatment (corticosteroid injection, eccentric training).<sup>1</sup>

Nevertheless review by Tognolo et al on prolotherapy used in other tendinopathy suggest benefits of prolotherapy despite the varying protocol and agree it is a useful and accessible conservative treatment.<sup>2</sup> Standardized trials would be useful.

### CONCLUSION:

Dextrose prolotherapy is a suitable treatment for CPT pain relief and overall improvement to functional baseline.

More studies are needed to further compare prolotherapy to other treatment or possible use in combination to other conservative treatment.<sup>2</sup>

### REFERENCES:

1. Morath O et al. Sclerotherapy and prolotherapy for chronic patellar tendinopathies—a promising therapy with limited available evidence, a systematic review. *J Exp Orthop.* 2020;7(1):89.
2. Tognolo L et al. Dextrose prolotherapy for chronic tendinopathy: A scoping review. *Eu J Integrative Med.* 2022 Sep; 56(102191).