P 1-121

Therapeutic Effect of PDRN Prolotherapy in Patients with Traumatic Complete Rupture of ATFL

Jae Hwal Rim[1*], Dae Gil Kwon[2†], Seong Ho Jo [1], Jong Wook Kim [3]

Medical Center of 7th Infantry Division of Republic of Korean Army, Department of Rehabilitation Medicine[1], Comprehensive&Integrative Medicine Hospital, Department of Rehabilitation Medicine[2], Korea Airforce 17th Fighter Wing Aeromedical Squadron, Department of Internal Medicine[3]

Objective
To evaluate the short-term effect of polydeoxyribonucleotide (PDRN) prolotherpay in patients with traumatic comcplete rupture of anterior talofibular ligament (ATFL).

Material and Methods
Fifteen patients (13 male, 2 female, mean age 34.4; range 20-54) with traumatic comcplete rupture of ATFL were included. All patients were diagnosed by ultrasound (US) and treated with US guided PDRN prolotherapy after ATFL injury following 2 or 3days. After PDRN prolotherpay, immobilization and clutch gait were applied for 3 weeks. Visual analogue scale (VAS), american orthopedic foot and ankle score (AOFAS), single assessment numeric evaluation (SANE) were measured pre-treatment, 1, 3weeks after treatment.

Results
One and 3 weeks after treatment, VAS, AOFAS, SANE score were significantly improved compared with pretreatment (Table 1). There was no complications after PDRN prolotherapy.

Conclusion
PDRN prolotherpay can be a useful treatment in patients with traumatic complete rupture of ATFL.

Table 1. Outcome measurements after treatment

	Before treatment	1 week	3 weeks
VAS score	5.6 ± 1.4	2.9 ± 0.9[a]	1.2 ± 0.5[a]
SANE	32.6 ± 7.5	78.5 ± 11.3[a]	83.8 ± 10.3[a]
AOFAS	30 ± 5.3	67.4 ± 11.7[a]	74.6 ± 10.4[a]

VAS = visual analogue scale; SANE = single assessment numeric evaluation; AOFAS = american orthopedic foot and ankle score.
* p<0.05 by independent T-test compared with before treatment