

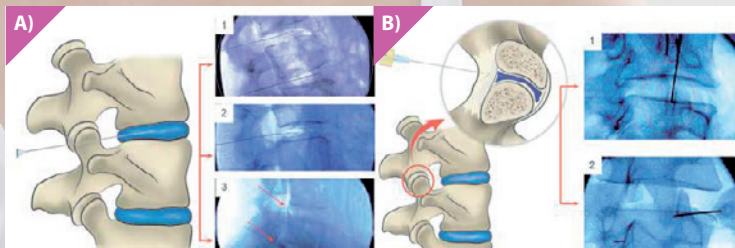
# endoret® (prgf®)

Endogenous Regenerative Technology

## CHRONIC LOW BACK PAIN INTRADISCAL AND INTRA-ARTICULAR FACET INFILTRATIONS WITH ENDORET (PRGF®)

Intradiscal and intra-articular facet infiltrations with Endoret (PRGF®) reduce pain in patients with Chronic Low Back Pain.

91% of patients showed an excellent score resulting in a significant pain reduction assessed by VAS scale.

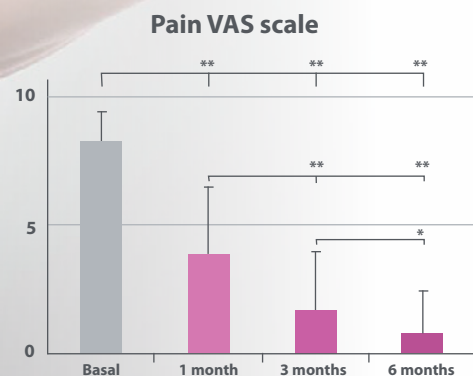


**FIG 1.** (a) Illustration and fluoroscopic-guided lumbar intervertebral disc (*insert 1 and 2*) images and peridural infiltration (*insert 3*). (b) Drawing and fluoroscopic-guided lumbar facet joint infiltrations of PRGF showing an intradiscal (*insert 1*) and intra-articular (*insert 2*) position of the needle tip

## CLINICAL STUDY

One intradiscal, one intra-articular facet, and one transforaminal epidural injection of Endoret (PRGF®) to 86 patients showed a statistically significant drop of pain from  $8.4 \pm 1.1$  before the treatment to  $0.8 \pm 1.7$  at 6 months after the treatment.

**FIG 2.** Pain assessment was determined using a VAS, with a line whose ends are labeled as the extremes: Score of 0 denoting "no pain" and score of 10 denoting "pain as bad as it could be". The VAS score was evaluated at the first visit before (Baseline) and after the procedure at 1, 3, and 6 months.



Defined as reduction of pain according to VAS scale  
\*\*P < 0.0001 \*P < 0.05

# ABSTRACT



**Fernando Kirchner, M.D., Eduardo Anitua, M.S., D.D.S., Ph.D.**

Intradiscal and intra-articular facet infiltrations with Endoret® (PRGF®) reduce pain in patients with chronic low back pain

## CONTEXT

**Low back pain (LBP) is a complex and disabling condition, and its treatment becomes a challenge.**

## AIMS

The aim of our study was to assess the clinical outcome of Endoret® (PRGF®) infiltrations (one intradiscal, one intra-articular facet, and one transforaminal epidural injection) under fluoroscopic guidance-control in patients with chronic LBP. Endoret® (PRGF®) which has been shown to be an efficient treatment to reduce joint pain.

## SETTINGS AND DESIGN

The study was designed as an observational retrospective pilot study. Eighty-six patients with a history of chronic LBP and degenerative disease of the lumbar spine who met inclusion and exclusion criteria were recruited between December 2010 and January 2012.

## SUBJECTS AND METHODS

One intradiscal, one intra-articular facet, and one transforaminal epidural injection of Endoret® (PRGF®) under fluoroscopic guidance-control were carried out in 86 patients with chronic LBP in the operating theater setting.

## STATISTICAL ANALYSIS USED

Descriptive statistics were performed using absolute and relative frequency distributions for qualitative variables and mean values and standard deviations for quantitative variables. The nonparametric Friedman statistical test was used to determine the possible differences between baseline and different follow-up time points on pain reduction after treatment.

## RESULTS

Pain assessment was determined using a visual analog scale (VAS) at the first visit before (baseline) and after the procedure at 1, 3, and 6 months. The pain reduction after the Endoret® (PRGF®) injections showed a statistically significant drop from  $8.4 \pm 1.1$  before the treatment to  $4 \pm 2.6$ ,  $1.7 \pm 2.3$ , and  $0.8 \pm 1.7$  at 1, 3, and 6 months after the treatment, respectively, with respect to all the time evaluations ( $P < 0.0001$ ) except for the pain reduction between the 3rd and 6th month whose significance was lower ( $P < 0.05$ ). The analysis of the VAS over time showed that at the end point of the study (6 months), 91% of patients showed an excellent score, 8.1% showed a moderate improvement, and 1.2% were in the inefficient score.

## CONCLUSIONS

**Fluoroscopy-guided infiltrations of intervertebral discs and facet joints with Endoret® (PRGF®) in patients with chronic LBP resulted in significant pain reduction assessed by VAS.**



**Surgical Device GmbH**

Alte Steinhäuserstrasse 19  
CH-6330 Cham / Switzerland

Tel. +41 (0)41 784 38 00  
Fax +41 (0)41 784 38 09

info@surgicaldevice.ch  
www.surgicaldevice.ch



**NEUTROMEDICS AG**

Alte Steinhäuserstrasse 19  
CH-6330 Cham / Switzerland

Tel. +41 (0)41 748 04 40  
Fax +41 (0)41 748 04 41

info@neutromedics.ch  
www.neutromedics.ch