

CHRONIC LOW BACK PAIN TREATMENT BY RADIOFREQUENCY

Antonio Ribas, MD^{1,2}, Gerard Oertmüller, MD²,
Johannes Ruttermann, MD², Klaus Von Battenn, MD, PhD²

1. Clinica Santa Lucia, Rio de Janeiro, RJ, Brazil

2. Institut für Anatomie und Zell Biologie, UKB, Berlin, Germany

BACKGROUND CONTEXT:

In 1933 Ghormley introduced the term 'facet syndrome' or "syndrome of the ramus medialis of the lumbar ramus dorsalis". Harris, McNab and McRae in the 1950's suggested that facet joint degeneration was the responsible for the low back pain. Since then several authors reported good results in relieving pain by injections of local anesthetics. The current evolution of radiofrequency seem to elarge its therapeutic value in the management of chronic pain and prevent the patient from major surgical procedures .

PURPOSE:

The purpose of this paper is clarify the current use of percutaneous radiofrequency lumbar facet denervation, its safety and efficacy and review the literature.

MATERIAL AND METHODS: :

A selected group of one hundred patients with confirmed clinical signs of lumbar facet joint arthropaty refractory to extended conservative treatment underwent 282 percutaneous radiofrequency procedures, at the levels L3-L4, L4-L5 and L5-S1 mostly bilaterally. They were folowed for a minimum of two years post procedure. Were studied 86 females and 14 males. Ages ranged from 25 to 82 years old.

After the percutaneous radiofrequency procedure, patients were followed with periodic visits or telephone contacts. Outcome measures were VAS, muscle spasm scores, MacGill short form pain questionnaire, range of motion and patient subjective global responses. Results was regarded as successful if pain reduction was more than 50% on visual analog scale and the duration of effect was more than two months. All outcome mesures were repeated at each 8 weeks.

RESULTS:

Subjective patient pain relief responses were graded as follows: exellent: more than 80%; good: 50 to 80%; fair: 30 to 50% and poor less than 30%. Some 80% of the patients obtained at least exellent relief of pain at 12 months and 13% good results. Five patients referred fair results and three poor results. No significant side effects were experienced. one case of short-term neuritis was observed.

CONCLUSIONS:

The results of our study showed , confirmed and in according with the literature, that the application of radiofrequency to medial branches of the dorsal rami in selected patients with chronic facet joint arthropaty promote pain relief for extended periods. The percutaneous lumbar facet joint radiofrequency therapy is a safe and efficacious minimally invasive procedure and can prevent the patient from major surgical procedures.

Antonio Ribas

E-mail ribasmd@gmail