

About a success case post-ultrasound guided radiofrequency ablation of the lumborum rami medialis

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Dear Editor,

Chronic lumbar pain is the main cause of incapacity and work absence, being as matter of fact a pathology of constant interest and updates. Several therapeutic approaches have been proposed and discussed, in which minimal invasive interventional techniques gained more recognition as treatment options. Image guidance use in infiltrative techniques of the spine reduces the neurovascular complications associated and augments the accuracy of the procedure. Fluoroscopy has always been the most used technique, although, theoretically, ultrasound (US) could represent an excellent alternative, because of its availability and lack of radiation exposure, but there are few studies that demonstrating its application and efficiency. With this case report, the authors intend to bring into discussion, alert the necessity of more studies, and simultaneously demonstrate that US guided radiofrequency ablation can be a valid option in selected cases.

75 years old man, with no prior disorders, had lumbar pain intensity of 8/10 on the visual numeric scale (VNS), with clinical and imaging findings compatible with degenerative facet syndrome, most expressive at L4-L5 levels. Therapeutic approach began with an US guided infiltration, with a combination of corticosteroid and long acting anesthetic (1cc of volume per level, 20mg of methylprednisolone with ropivacaine 0.2%), of the lumborum rami medialis at L4 and posteriors at L5 levels bilaterally, with complete symptoms resolution for two months. Given the improvement, US guided radiofrequency ablation (RFA) of the previously blocked nerves have been proposed and accepted by the patient. In a first consultation, the patient underwent thermic US RFA (80^o Celsius for 2min), of the rami medialis of L3 and L4 and posterior rami of L5 on the right side (Figure 1), then one month past the left side was intervened as well. There were no immediate or late complications associated or reported by the patient with the procedure. At two, six and twelve-months post intervention the patient had 0/10 intensity at VNS. The patient was also included in a rehabilitation program to optimize and prevent pain relapse.

In summary, the use of US guidance in lumbar rami medialis ablation, in selected patients, seems to have good results in terms of safety and efficiency regarding pain control, in addition to the advantages of portability, widespread availability, less time-consuming technique, less costs associated and no radiation exposure. Thus, the authors think that US guided RFA technique can be an important and valid therapeutic approach for low back pain due to degenerative facet syndrome.

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Submitted: November 29, 2021
Accepted: December 19, 2021

How to cite

Martins DC, Correia R, Carvalho JL. About a success case post-ultrasound guided radiofrequency ablation of the lumborum rami medialis. *Acta Fisiatr.* 2021;28(4):290-291.



10.11606/issn.2317-0190.v28i4a192962



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Figure 1. US guided RFA technique

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