Post-Procedural Pain After Radiofrequency Denervation

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Background
When treating zygapophyseal-joint pain with radiofrequency denervation a period of post-procedural pain will result. How many of the patients that experience pain and for how long after the denervation is not previously described.

Objectives
To explore how many of the patients treated with radiofrequency denervation of the medial branches that experience pain and for how long the pain persists.

Methods
During a period of 6 years all patients treated with radiofrequency denervation was interviewed. They were asked if they had any postprocedural pain and for how many days it persisted. The questions were asked 1 month after the radiofrequency-denervation.

Method

The diagnostic tests and the radiofrequency denervations was performed according to the ISIS guidelines, except for the thoracic region where the method we describe on another poster was used.

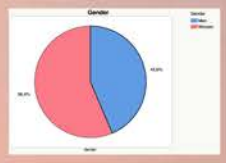
All patients treated by radiofrequency denervation had a telephone appointment 1 month after treatment.

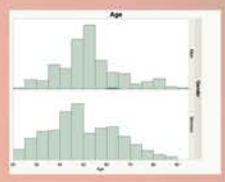
At that time they were asked if they had experienced any post-procedural pain, and if so for how long time did they experience this. They were also asked for signs of infection and if they had needed acute treatment on a hospital, emergency ward or other health institution during the period.

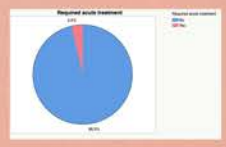
Results

Post-procedural pain after radiofrequency denervation of medial branches

	n	Proportion with post-procedural pain	Duration of pain (Median days)	Duration more then 4 weeks
Cervical	101	84 %	14	12.5 %
Thoracic	140	86 %	14	16.1 %
Lumbar	243	76 %	14	16.3 %







Discussion

Radiofrequency denervation of medicial branches (i.e. zygapophyseal joints) is described to have very few adverse effects. One clinically significant negative effect is thou the post-procedural pain many patients describe. In order to be able to psychologically prepare the patients for this it is important to gain knowledge of for how long this period persists and what the risk is to experience pain.

No data was included to describe how severe the pain is, but only 3.5 % of the patients needed acute treatment during the first month which is in accordance with the amount of patients decribing more severe pain during the first month.

This study gives the clinician some more usable information when preparing the patients for what will come after the radiofrequency denervation planned for.

References

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3. Ma K, Yiqun M, Wu T, Wang W, Liu X, Huang X, et al. Efficacy of diclofenac sodium in pain relief after conventional radiofrequency denervation for chronic facet joint pain: a double-blind randomized controlled trial. Pain Med. 2011 Jan;12(1):27–35.

Ethical approval
The study was approved by the Regional Ethical review Board in Umeå, Sweden. Dnr 2012-446-31M

76 - 86% of the patients treated with radiofrequency denervation of medial branches experienced a post-procedural pain.

The median duration of the pain was 14 days.

12 - 16% of the patients describe a pain duration of more then 4 weeks.

3.5 % of the patients required acute treatment during the first month after RF-treatment

No infection or other severe adverse effects was seen