Clinical audit of interventional procedures in a chronic pain unit

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Background and Goal of Study: Interventional procedures consist in several minimally invasive techniques to reduce pain aligned with a multimodal approach in chronic pain management.

The American Society of Interventional Pain Physicians has developed evidence-based guidelines for interventional pain procedures, in order to improve quality of pain management.

The aim of this retrospective audit was to monitor the quality of interventional procedures and to ensure the safety, efficacy and patient satisfaction at the chronic pain unit in our institution.

Materials and Methods: Between 30th September 2015 and 30 November 2017, a retrospective clinical audit to examine the quality of interventional pain management procedures was performed in our institution.

A questionnaire (including immediate pain relief, discomfort, pain and anxiety during the procedure) was provided to each patient after the procedure.

Efficacy of each procedure was evaluated, using the Numerical Pain Rating Scale (NPRS) registered before, immediately after, 48h and 1month later. In order to avoid complications most of the procedures were ultrasound guided and patient’s vital signs were monitored.

Results and Discussion: A total of 178 procedures were performed, 140 patients participated in the survey (38 were excluded due to illiteracy, refuse and loss of follow-up data). 75,7% female and 24,3% male, with a mean age of 62,6 years.

All patients presented pain relief after procedure, 78% presented a NPRS reduction superior to 30%. Regarding patient satisfaction, 75% were very satisfied and satisfied, 24,3% slightly satisfied and 0,7% were dissatisfied. There were no major complications or adverse effects.

A good quality interventional chronic pain management should include high efficacy, low complication rates and high patient satisfaction.

As standardly accepted, a response is considered clinically relevant if the NPRS score was reduced by at least 30%. Patients with a higher level of pain reduction tend to be more satisfied with the procedure.

Patient satisfaction is good indicator of quality of health care.

Interventional Procedure	Frequency
Suprascapular Nerve Block	67
Genicular Nerve Block	18
Piriformis Muscle Injection	10
Lumbar Epidural	6
Lateral Femoral Cutaneous Nerve Block	6
Sciatic Nerve Block (popliteal)	6
Axillary Nerve Block	5
Sacro-iliac Joint Injection	5
Occipital Nerve Block	3
Median Nerve Block	3
Radial Nerve Block	2
Caudal Epidural	2
Morton's Neuroma Nerve Block Injections	2
Cubital Nerve Block	1
Acromioclavicular Injection	1
Tibial Nerve Block	1
Peroneal Nerve Block	1
Ilioinguinal and Iliohipogastric Nerve Block	1
Total	140

Table 1: Type and frequency of interventional procedures

Figure 1- Immediate pain score change before and after interventional pain management procedures

Figure 2- Patient satisfaction with the immediate outcome of interventional pain management procedures

Conclusion: Our study concludes that these interventional procedures lead to patient satisfaction due to pain relief and very low complication rates, so they are a valid technic to reduce chronic pain.

References

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