New interventions in managing chronic pain after thoracotomy

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Chronic pain that develops after thoracotomy incision is an old issue but it was defined as chronic post thoracotomy pain syndrome after the Second World War. The pain that develops is neuropathic in nature and is due to scaring around the nerve tissue, neuroma formation or, the nerve is traumatized intraoperative by the retractor or the diathermy. Conventional management of neuropathic pain, whether pharmacological or interventional, has a very limited success. Intercostal steroid nerve blocks, NSAIDs, tramadol, antidepressants, intravenous infusion of sodium channel blockers as lidocaine, anticonvulsants ....etc has a very limited periods of relief. New interventions done for longer periods of relief are now performed with great success. New interventions include the injection of the nerve from its starting point i.e., dorsal root ganglion injection using steroids or recently magnesium injection has better results. Transforaminal pulsed radiofrequency treatment of the nerve root leaves the nerve intact but affecting the conduction function of the nerve producing an excellent pain relief for a long time extending from 9 - 18 months .The pulsed radiofrequency is safe and it uses the electric field generated around the thermocouple probe and not the thermal destructive effect. The other more safe option is the cryoanalgesia, which consumes the hypothermic effect produced by the ice ball generated around the probe tip. The effect of cryoanalgesia induces a very effective analgesia that lasts for 3-12 months. Cryoanalgesia has no risk for neuroma formation and can be used for freezing the neuromas located inside the scar tissue of the incision itself. So, chronic post thoracotomy pain syndrome no longer considered a night-mare.