Intercostal neurolysis

Cappellari et al., from the Fondazione IRCCS Cà Granda Ospedale Maggiore Policlinico, University of Milan, Italy.investigated the possible role of intercostal surgical neurolysis in relieving chronic neuropathic pain refractory to other non-surgical treatments in patients with postsurgical thoracic pain.

They retrospectively collected clinical data on ten patients (age range: 20-68 years) suffering from neuropathic pain for at least two months following thoracic surgery underwent intercostal neurolysis.

Compared to pre-neurolysis, pain intensity decreased one month post-neurolysis and remained stable two months post-neurolysis [median score (IQR): 8 (6; 9) pre-neurolysis, 4 (3; 5) one month after and 3 (2; 5) two months after, p<0.0001]. Antiepileptic drugs for pain control decreased after neurolysis (10/10 vs. 2/10, p= 0.008).

Surgical intercostal neurolysis may be a promising therapeutic option in patients with chronic neuropathic pain in association with neurological deficits [1].

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11 patients with intractable cancer-associated chest wall pain were treated with a diagnostic intercostal nerve block. Six patients subsequently received chemical neurolysis with phenol using the same approach. No serious adverse events were observed. Radiopaque contrast dye spread into the paravertebral space in all 11 patients, and in 1 patient contrast dye spread into the epidural space. Seven of 11 patients experienced pain relief from the diagnostic blockade. Four of six patients experienced pain relief from the neurolytic blockade. The principal reportable finding from this case series is the observation that contrast dye spread liberally from the intercostal space into other anatomic spaces, even though very small volumes of injectate (less than 5 mL) were used. Definitive evidence of safety and efficacy of intercostal nerve block and neurolysis for cancer pain will require a prospective randomized clinical trial [2].

Complications

Kim et al., report a case in which a lung cancer patient developed paraplegia after receiving left T8-10 and 11th intercostal nerve neurolysis and T9-10 interlaminar epidural injections [3].

References

1)
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3)

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