

Sir,

Chronic testicular pain is common and well recognized, but its pathophysiology is poorly understood. Non-invasive treatment techniques include drugs like non-steroidal anti-inflammatory drugs (NSAIDs), tricyclic antidepressants, gabapentin, carbamazepine and α -adrenergic antagonists. Minimally invasive techniques include Transcutaneous Electrical Nerve Stimulation (TENS) analgesia and pulsed radiofrequency of nerves. Transrectal periprostatic administration of lignocaine and methylprednisolone is reported in the literature for treatment of chronic orchialgia.^[1] Spermatic cord block anaesthesia was also used successfully for this purpose.^[2,3] We describe a case of post-surgical orchialgia treated successfully with therapeutic penile block using 0.5% bupivacaine and methylprednisolone 40 mg/mL.

A 22-year-old male was referred to the pain clinic for complaint of burning pain in the testis and scrotum on the right side. This was not responding to NSAIDs like ibuprofen. He was operated for the ailment of spermatocele on the right side. Right from the first post-operative day, he was having continuous burning sensation in the right testis and scrotum. This pain was not radiating to the left side or to the lower abdomen. Because of continuous pain, he was unable to do any work and lost his wages. His sexual desire was also adversely affected. Pain score on Visual Analogue Scale (VAS) of 0–10 was 9 on the affected side. His general and systemic examination revealed no abnormality. On local examination, the right testis and scrotum were tender. Scar of surgery was healthy. There was irregular swelling of size 4 mm \times 4 mm on the right testis. There was no evidence of fluid in the scrotum. All investigations were within normal limits.

Along with NSAIDs, he was treated with oral Tramadol 50 mg BD, Carbamazepine 100 mg BD and Gabapentin 400 mg BD for 4 days without success. Then, it was decided to give interventional treatment with therapeutic block. Drugs used were 1 cc of 0.5% bupivacaine and 1 cc of methyl-prednisolone (40 mg/mL) taken in a single 2 cc disposable syringe. Under all aseptic precautions, 1.5 cc of the combination was injected on the right pubic tubercle. The spermatic cord was rolled between the fingers near the base of the scrotum and 0.5 mL of the drugs were injected around it. Immediately after injection, the pain score on VAS was 0. Prophylactic oral antibiotic ciprofloxacin 500 mg BD was advised

Treatment of post-operative orchialgia with therapeutic unilateral penile and spermatic cord block

for 5 days. The patient was comfortable for the next 15 days. Again, after 15 days, he presented with the same complaints and had a pain score of 9 on VAS. Again, the therapeutic block as described above was repeated. Immediately after injection, the pain score on VAS was 0. This time, relief lasted for 2 months. Again, he presented with a pain score of 3 on VAS. It was treated with NSAIDs for 7 days, with the patient having complete relief.

Cause of post-operative orchialgia is injury to the nerves. This could be explained by the phenomenon of neural plasticity. In neural plasticity, disease or injury may result in changes at all levels of the nervous system, resulting in amplified pain messages. Another explanation of post-injury/surgery chronic pain syndromes is the development of sprouting between axons. This can occur either at the level of the dorsal root ganglion or at the dorsal horn. This results in light touch stimuli being re-routed into the pain pathway and felt as pain by the patient.

In the absence of any findings that require surgical treatment, conservative treatment is advised.^[4] After initial measures like NSAIDs, tricyclic antidepressants and gabapentin fail, minimally invasive techniques are the next step.

Spermatic cord block anaesthesia using a local anaesthetic and a steroid like methylprednisolone can be used to treat this condition.^[2,3] Methylprednisolone acts by directly blocking the "C" fibres.^[5] It also reduces the neurilemmal oedema. With repeated injections, the intensity of aberrant signals is brought down significantly and the condition becomes manageable with simple analgesics.

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