

Complex regional pain syndrome in central cord syndrome: A steroid solution to the integrated multidisciplinary

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ABSTRACT

Summary: Complex regional pain syndrome (CRPS) is a rare perplexing painful syndrome of the extremities that is disproportionate to the inciting event and associated with evidence of vasomotor, sudomotor and trophic changes at the affected region. The possibility of CRPS in spinal cord injury is overlooked as it is sparsely reported. Failure to recognize and treat CRPS in its early stages leads to development of disabling chronic symptoms. We describe a 45-year-old patient who developed CRPS of the left upper limb in the background of traumatic central cord syndrome. He presented with worsening burning sensation with features of hyperalgesia, allodynia and edema of his left upper limb alongside restriction of left shoulder passive range of motion 3 months post trauma. He received comprehensive multidisciplinary rehabilitation care that included (a) tapering dose of prednisolone and (b) non-pharmacological approaches consisting of cognitive behavioural therapy, transcutaneous electrical nerve stimulation, graded range of motion and strengthening exercises, mirror visual feedback and desensitisation therapy. Patient showed significant positive clinical response to the treatment regime which translated to large improvement in his functional activities and participation that carried on beyond the period of treatment. CRPS is rare but a possible complication of cervical cord syndrome that should be at the back of one's mind prompting early diagnosis and proper treatment of acute CRPS curbing long term complications. CRPS in its acute phase can be well treated with prednisolone in rehabilitation settings translating into functional progress and improvement in quality of life.

Effectiveness of rapid test kit antigen (RTK-Ag) as a screening test for COVID-19 in the emergency department

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ABSTRACT

Introduction: There is a need for rapid detection of COVID-19 status in patients attending the Emergency Department (ED) to urgently assign appropriate care pathways and reduce overcrowding. Rapid Test Kit Antigen (RTK-Ag) was thought to be the most convenient bedside test in ED for this purpose. We aim to compare the RTK-Ag results with the gold standard Reverse-Transcription-Polymerase Chain Reaction (RT-PCR) results and determine its effectiveness as entrance and pre-admission screening test. **Materials and Methods:** 465 patients with unknown COVID-19 status presenting to ED Hospital Sungai Buloh from 13/10/2021 – 12/1/2022 underwent both RTK-Ag and RT-PCR prior to admission. Five patients were excluded due to incomplete documentations. Results from both tests were extracted and compared. **Results:** Eleven patients had true positive results, and none had false positive. 17 had false negative and 432 were true negative. All false negative patient had CT value > 30. Therefore, the sensitivity of RTK-Ag is 39.2% with specificity of 100%. The Positive Predictive Value (PPV) is 100% with Negative Predictive Value (NPV) of 96%. **Conclusion:** From a clinical perspective, patients with CT value > 30 were not treated as having active COVID-19 infection, thus did not require isolation. The sensitivity and NPV of RTK-Ag was 100% in detecting active COVID-19 versus no infection or non-active state. Therefore, bedside RTK-Ag is as effective as RT-PCR and can be used in ED to expedite admission. This has greatly helped in reducing the long-waiting time in ED for RT-PCR and is cost effective.

Keywords: COVID-19, Rapid Test Kit Antigen, emergency department