

hand surgeons managing CTS. Recording correlations may provide a basis for investigating CTS pathophysiology post AZD1222.

Abstract citation ID: znac269.138

### 551 Bilateral Carpal Tunnel Syndrome Following AstraZeneca (AZD1222) COVID-19 Vaccination: A Case Report

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Covid-19 infections correlate with peripheral neuropathy. Correlations extend to vaccination, with reports of polyradiculoneuropathy. We report a case of a 59-year-old right-hand dominant female presenting with bilateral carpal tunnel syndrome (CTS) nineteen days after AZD1222.

BSSH diploma-qualified hand surgeon assessment identified increasing median nerve (MN) paraesthesia and upper limb pain. Symptoms occurred post-AZD1222 second dose administered 12-weeks after the first. Past medical history was unremarkable, and she had not contracted Covid-19. Examination found severe CTS-signs: thenar weakness, positive provocative tests (Phalen's and Tinel's) and 8mm MN static 2-point discrimination. Electrophysiology confirmed very severe wrist bilateral median neuropathies, with no evidence of widespread peripheral neuropathy. Left carpal tunnel decompression found a swollen MN bulging through the transverse carpal ligament. The patient reported symptom improvement 2 weeks post-operatively.

This was reported using MHRA "yellow card" protocols as symptoms occurred within the period of neuropathic side effects. Proposed neuropathy mechanisms in Covid-19 include vasa nervorum microangiopathy. Post-vaccine effects could be connected to such changes in microcirculation implicated in CTS. Vaccines containing SARS-CoV-2 antigens enhance autoimmunity and may cause antibody-mediated effects on the synovial sheath, worsening symptoms in pre-existing CTS. Though we do not claim causality, emerging post-vaccination effects may include exacerbation. It is not uncommon for clinicians to diagnose CTS in patients with symptoms overlooked until an inciting event. With Covid-19 'boosters' the long-term strategy, vaccinations may increase neuropathy contribution. Increasing caseloads may present future challenges to