

Shoulder injury related to vaccine administration following COVID-19 vaccination: Insights from a cross-sectional study in Northern Jordan

Naser Obeidat, MD* Ruba Khasawneh, MD* Ahmad Alrawashdeh, PhD** Yahya Alshgerat, MD*** Leen Walid Sawalha, MD**** Dimah Jiad, MD***** Ahmad Al Hanani, MD***** Bayan Ibrahim Al Mashaleh, MD***** Ammar Al-Tawarh, MD***** Majed M. Aljarrah, MD*****

ABSTRACT

To examine the clinical presentation, risk factors, and management strategies of shoulder injury related to vaccine administration (SIRVA) following COVID-19 vaccination. A cross-sectional study was undertaken in Northern Jordan from May 2021 to May 2022. Adults with new-onset shoulder symptoms post-COVID-19 vaccination were included. Demographic, clinical, and vaccination-related data were collected via medical records and a structured survey. Symptom characteristics, severity, duration, and treatment modalities were analysed. Sixty-three participants were enrolled. Pain at the injection site (46.0%) and limited range of motion (46.0%) were most commonly reported. Overall, 84.2% experienced moderate to severe symptoms, and 34.9% noted symptoms persisting beyond one month. AstraZeneca recipients reported higher rates of adverse events than those receiving Pfizer or Sinopharm. Conservative management, involving analgesics (44.4%) and physical therapy (42.9%), was prevalent, whereas invasive interventions were rarely necessary. Notably, 87.3% of participants expressed reluctance to receive future vaccines. SIRVA after COVID-19 vaccination can present with prolonged moderate to severe symptoms and substantial vaccine hesitancy. Emphasising proper injection technique, enhanced provider training, and early intervention is crucial to reducing the burden of SIRVA and maintaining public trust in vaccination.

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- * Department of Diagnostic Radiology and Nuclear Medicine,
Faculty of Medicine, Jordan University of Science and Technology,
Irbid, 22110, Jordan.
Email: nmobeidat8@just.edu.jo
- ** Department of Allied Medical Sciences,
Jordan University of Science and Technology,
Irbid, 22110, Jordan.
- *** Surgery Department, Princess Basma Hospital,
Irbid, Jordan.
- **** King Abdullah University Hospital,
Irbid, 22110, Jordan.
- ***** Department of Obstetrics and Gynaecology,
Jordan Hospital, Amman, Jordan.
- ***** Department of Internal Medicine, King Abdullah University Hospital,
Irbid, 22110, Jordan.
- ***** Department of Neurology, King Abdullah University Hospital,
Irbid, 22110, Jordan.
- ***** Department of Surgery, Abdali Hospital, Amman, Jordan.