Post-Immunization Arthropathy: The DoD Experience

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Methods

We performed a retrospective chart reviews of 52 cases from the DHA-IHD Vaccine Adverse Events Clinical System database.

Case reports of post-immunization arthropathy are described in the literature. The etiology is believed to be inadvertent penetration of the shoulder bursa and/or capsule by vaccine antigen, which produces inflammation and injury in structures outside the deltoid. Subdeltoid or subacromial bursitis are the most frequently described pathologies, but other affected structures and diseases have been observed.

The cases were analyzed for trends in demographics, the vaccine administration mechanism, vaccine type or exacerbation of preexisting conditions. Using the Vaccine Adverse Event Reporting System (VAERS), 2010-2017. Vaccine, 2019.


Abbreviations: Body Mass Index (BMI), Intramuscular (IM)

Institutional Review Board (IRB)

A number of significant limitations in this case series are worthy of note. Our sample sizes are small. We were limited to available documentation, which had no consistency. Cases were frequently not followed to resolution. Imaging cannot differentiate vaccine causality from other etiologies. We believe our convenience sample may overrepresent very severe cases and may underrepresent total cases.

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Intramuscular (IM)

Institutional Review Board (IRB)

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