## AZD-1222

## Subacromial-subdeltoid bursitis and supraspinatus tear following an improper injection technique: case report

A 51-year-old woman developed subacromial-subdeltoid bursitis and supraspinatus tear following an improper injection technique for the vaccination with AZD-1222.

The woman without any pre-existing shoulder pain received second dose of AZD-1222 [Oxford-AstraZeneca COVID-19 vaccine; *dose not stated*]. She received the injection using a 25-gauge needle, 1.5 inches in length, in an injection site based on landmark of 1 finger breadth below the mid-lateral border of the acromial process. The needle direction was perpendicular to the skin at the injection site. After receiving vaccination, within 3 hours she developed right shoulder pain. Thus, she had received unspecified over-the-counter drugs. After 4 days when her pain did not improve, she presented with tenderness over the deltoid area, with limited range motion of her right shoulder in all directions. X-ray of the anteroposterior and lateral transcapular right shoulder demonstrated soft tissue swelling without fracture. The humeral head was displaced inferiorly with a widened acromiohumeral distance which could have been from joint effusion or distended subacromial-subdeltoid bursa. The greater tuberosity revealed cortical irregularities and subcortical sclerosis. Ultrasonography of the right shoulder demonstrated subacromia subdeltoid bursitis with synovial wall thickening, and internal septa, tenodesis with small full-thickness tear at the posterior fiber of supraspinatus. Her subacromial-subdeltoid bursitis and supraspinatus tear were attributed to improper injection technique used for the vaccination with AZD-1222 (medication error).

The, woman was then initiated on unspecified non-steroidal anti-inflammatory drugs. Consequently, her clinical symptoms improved gradually over the next few days.

Boonsri P, et al. Combined subacromial-subdeltoid bursitis and supraspinatus tear following a COVID-19 vaccination: A case report: Complications following a COVID-19 vaccination. Annals of Medicine and Surgery 69: 102819, Sep 2021. Available from: URL: http://doi.org/10.1016/j.amsu.2021.102819