Effect of Dry Needles on Volume of Subcutaneous Immunotherapy

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Disclosures

- None

- The views expressed are those of the presenter and do not reflect the official views or policy of the Department of Defense or its components

Introduction

- Allergen Immunotherapy (AIT) is a safe therapy approved for patients with allergic rhinitis, allergic asthma, and atopic dermatitis

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- While generally well-tolerated, adverse effects have been reported

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- Of these, local reactions (LRs) are most common

Practice Parameter

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  - Antihistamine pretreatment
  - Split SCIT dosing
  - Dry needles

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Smith D, et al. Cureus, 2021

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- Dry needles used in administration of COVID-19 vaccines have been associated with under-dosing due to presence of dead space within syringes
- We investigated effect of using dry needles on volume of SCIT delivered

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Methods

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- Doses equaling a 26-dose build-up SCIT schedule
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- Results were repeated in triplicate

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- Compared to 6.14mL expected after summation of build-up schedule
- Difference of 0.16mL (2.67%) between expected and delivered dose
- Per dose given, largest difference noted at 0.1ml dose (9.5%)

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- Average loss of 0.16mL during 26-dose build-up likely is not significant in volume or effectiveness

Questions?

References