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# 26914 Ustekinumab-induced myositis: A case series

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**26901**

**The genetics of early-stage melanoma in a veteran population**

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Military personnel are at increased risk for melanoma compared with the general population. To improve understanding of the genetic signature of early-stage melanomas in veterans, mutation profiling using next-generation sequencing (NGS) was performed on melanoma tissue samples from patients at the Iowa City VAMC and analyzed for hotspot mutations. Genetic analysis identified BRAF (36%), TP53 (26%), NRAS (19%), CDKN2A (11%), KIT (8%), and BAP1 (7%) mutations with the highest prevalence. Although common variants in BRAF were detected at lower rates than what is reported for the general population, 55% of cases showed activating mutations in the RAS/RAF pathways. Variants in TP53 and KIT were detected at higher rates than in the general population. Patients with prior history of melanoma were at significantly higher odds of having TP53 mutation (OR = 2.67, $P$ = .04). This finding suggests that TP53 may indicate alternative exposures in the military population and may be used to help identify veterans at particularly increased risk of recurrence. In conclusion, this study provides new information regarding both genetics of melanoma in a veteran population and early-stage tumors. Ultimately, these findings should influence how we educate, screen, and treat melanoma in veterans and active military personnel and pave the way for continued research to identify exposures and risk factors unique to this population.

*Commercial Disclosure: None identified.*

**26908**

**The safety of isotretinoin treatment in patients with peanut or cashew allergies—A case series**

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Background: The gold standard treatment for nodulocystic acne vulgaris, isotretinoin, is contraindicated in patients with a soy allergy as its capsule contains hydrogenated soybean oil. This has raised concern for its use in patients with peanut and cashew allergies due to the potential for cross-reactivity. Cashew allergy has been reported to confer a greater risk of cross-reactivity to soy, resulting in rare allergic reactions to isotretinoin. This case series sought to further evaluate the safety of isotretinoin use in eleven patients with a history of peanut or cashew allergy.

Methods: Five males and six females were identified with a history of peanut or cashew allergy and treatment for acne vulgaris with isotretinoin between January 2010 and June 2020. Ten patients had a history of peanut allergy; one of these patients had a coexisting cashew allergy. One patient had a history of tree nut allergy including cashews.

Results: Reported reactions to peanut or cashew included urticaria, pruritis, edema, dysphagia, and anaphylaxis independent of isotretinoin use. Four patients reported positive immunoglobulin E response to peanut. One patient had a positive skin prick test for peanut. All eleven patients tolerated isotretinoin without evidence of allergic reaction.

Conclusion: Avoidance of isotretinoin in patients with peanut allergies is likely unnecessary. Additional studies are needed to assess isotretinoin's safety in patients with cashew allergies.

*Commercial Disclosure: None identified.*

**26914**

**Ustekinumab-induced myositis: A case series**

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Ustekinumab (UST) is a monoclonal antibody that blocks proinflammatory cytokines IL-12 and IL-23. Off-label use of UST has shown promising results for moderate to severe hidradenitis suppurativa (HS) in patients who have failed to respond to or unable to tolerate adalimumab, the only Food and Drug Administration (FDA) approved treatment for HS. Previously, myositis has not been reported as an adverse effect of UST. We present two patients with poorly controlled HS who experienced new onset myositis shortly after beginning treatment with UST. Abnormal electromyography (EMG) demonstrated myopathic appearing motor units in the bilateral biceps in patient 1. Creatinine kinase was elevated greater than three times normal in patient 1, and normal in patient 2. Patient 2 had marked reduction in ambulation requiring use of a cane. Both patients experienced a sequela of symptoms such as generalized muscle weakness, muscle swelling with warmth to the areas, and myalgias with improvement of symptoms shortly after discontinuation of UST. A proposed mechanism may be related to the overexpression of IL-12 and IL-23 secondary to UST's receptor blockade. IL-12 can initiate IL-32 production, a cytokine that has been shown to be overexpressed in HS.3 Il-32 induces the production of IFNy and IL-17, byproducts of TH1 and TH17 helper cells which have been implicated in autoimmune myositis. As the use of UST increases in HS patients, it is important for clinicians to consider the potential risk of drug-induced myositis. Long-term clinical surveillance is needed to evaluate the significance and frequency of this occurrence.

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**26916**

**Effectiveness of guselkumab among patients with moderate-to-severe plaque psoriasis in the Corrona Psoriasis Registry**

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Background: Guselkumab is an IL-23 inhibitor approved for the treatment of moderate-to-severe plaque psoriasis (PsO). To date, there is limited information on the effect of persistent guselkumab treatment on disease severity in a real-world setting.

Objective: To assess the effectiveness of guselkumab following 9-12 months of persistent use among patients with moderate-to-severe plaque PsO.

Methods: This study included 113 adult plaque PsO patients enrolled in the Corrona PsO Registry between July 2017 and March 2020 with an Investigator's Global Assessment (IGA) score ≥3 and Body Surface area (BSA) ≥10%, who initiated guselkumab at or after enrollment, and had a follow-up visit after 9-12 months of persistent treatment with guselkumab. Baseline demographics, disease characteristics, and treatment history were collected; response rates and mean change in disease activity between the index and follow-up visits were calculated.

Results: Guselkumab users were mean age 50 years, 40% female, 70% white, and 59% had a body mass index (BMI) ≥30 kg/m$^2$. Comorbidities included cardiovascular disease (10%), hypertension (35%), hyperlipidemia (20%), diabetes (19%), and depression (23%). The average PsO duration was 17.5 years, and 66% of patients had previously used at least one biologic. The mean IGA was 3.3 at baseline. At follow-up, 62% (95% CI: 53, 71) of patients achieved an IGA 0/1, and 40% (95% CI: 31, 49) achieved an IGA of 0.

Conclusion: Real-world patients with moderate-to-severe plaque PsO treated persistently with guselkumab for 9-12 months demonstrated improvement in PsO severity.

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