

profile. This analysis compared the effect of dupilumab vs placebo on lung function in VOYAGE patients with type 2 asthma stratified by allergen sensitization status.

Methods: Children were classified as non-sensitized (n=75; no perennial aeroallergen-specific IgE ≥ 0.35 kU/L at baseline), monoallergen- (n=58) or multiallergen (n=203)-sensitized (1 [mono-] or >1 [multi-] aeroallergen-specific IgE ≥ 0.35 kU/L, respectively). Least squares mean (LSM) change from baseline in pre-bronchodilator percent predicted forced expiratory volume in 1 second (pre-BD ppFEV₁) was assessed.

Results: Dupilumab vs placebo significantly improved pre-BD ppFEV₁ in multiallergen-sensitized patients at Weeks 2 (LSM difference [95% CI]: 5.3 percentage points [1.4–9.2]; P<0.01) and 52 (9.0 percentage points [4.0–14.1]; P<0.001) and in monoallergen-sensitized patients at Week 52 (10.1 percentage points [4.2–16.1]; P<0.01).

Conclusion: Dupilumab improved pre-BD ppFEV₁ as early as Week 2 in children with moderate-to-severe type 2 asthma and mono- or multi-allergen sensitizations; improvements were sustained through Week 52. Small sample sizes limited efficacy comparisons among the 3 groups.

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HOW ALLERGISTS ARE SAVING MARRIAGES: A REVIEW ON SEXUAL INTERCOURSE PRESENTING AS EXERCISE-INDUCED ASTHMA

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Introduction: Exercise has been long associated as a trigger for asthma. Exercise induced symptoms have been attributed to 40-90% of asthmatic patients. However, sexual intercourse is uncommonly associated as exercise. The purpose of this review is to investigate sexual intercourse as an underdiagnosed trigger for asthma exacerbations.

Methods: We collected in this review the available literature on this subject. The PUBMED database was searched by a combination of keywords and MESH terms: sexual intercourse OR honeymoon asthma OR sexual behavior AND allergy OR allergic reaction. The studies retrieved were independently evaluated by the authors and included in this review based on their clinical correlation and pertinence. No IRB was required.

Results: Several case studies have reported post-coital asthma exacerbations however more cases have been reported of allergic reactions to coital activity such as seminal fluid or latex. The few reported cases allude to underreporting of this condition given the intimate nature of this subject. Disclosure relies on the patient's comfortability with their provider and the provider's awareness of characterizing sexual activity as exercise. It is estimated the energy expenditure of sexual activity is approximately equivalent to walking up two flight of stairs. When sexually activity induced asthma is properly identified and treated, allergists are placed in a position where they can improve their patients' quality of life.

Conclusion: Properly investigating all causes of asthma exacerbations, including sexual intercourse, which shares its pathogenesis with exercise-induced asthma, can place allergists in a position of positively improving their patient's lives, including their marriages.

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HOME MONITORING & TELEHEALTH EDUCATION FOR ASTHMA DISEASE MANAGEMENT

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Introduction: Asthma disease management requires self-management skills and personalized clinical interventions. Allergy and

Asthma Network (AAN) collaborated with CurieAI and VitalFlo to monitor patient symptoms and spirometry as part of a personalized telehealth asthma education program.

Methods: The Not-One-More-Life telehealth AAN program enrolled participants with severe asthma between July and December 2021 for a 6-week virtual asthma telehealth coaching program. Participants were provided with a cellular-connected bedside tablet device for passive nighttime symptom monitoring. The CurieAI software running on the tablet device enabled daily overnight monitoring for objective assessment of audible symptoms; like cough, sneeze, throat-clearing, wheezing, obstructive-snooring, grunting. VitalFlo solution using a MIR spirometer was provided to measure FEV₁, FVC, FEV₁/FVC parameters.

Results: 22 participants used the two home monitoring devices. There were a total of 862 nights of monitoring for symptoms (39+ nights per participant in the 6 weeks). 20 high-level alerts were generated for severe or worsening symptoms. An asthma coach followed these symptoms with the participant, provided treatment plan guidance, and advised them to see the healthcare provider. Participants used VitalFlo solution for an average of 3.5 days per participant during the same 6-week period. 32% of participants experienced improvement in their FEV₁ and FVC, and 27% improvement in FEV₁/FVC.

Conclusion: Asthma disease management telehealth program with home monitoring devices successfully followed participants' health status. Participants who used the Vitalflo platform to document spirometry use indicated improvement between pre-and-post recordings and the nighttime monitoring identified worsening of symptoms for timely follow-up.

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REAL-WORLD EFFECTIVENESS OF DUPILUMAB ON ORAL CORTICOSTEROID USE IN PATIENTS WITH MODERATE-TO-SEVERE ASTHMA

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Introduction: Dupilumab, a fully human monoclonal antibody, blocks the shared receptor component for interleukin-4/-13, key and central drivers of type 2 inflammation in asthma. Patients with oral-corticosteroid (OCS)-dependent severe asthma are at increased risk of OCS-related adverse events. In phase 3 VENTURE (NCT02528214), add-on dupilumab 300 mg every 2 weeks vs placebo reduced OCS maintenance dose in patients with OCS-dependent severe asthma. Dupilumab demonstrated an acceptable safety profile. We investigated the real-world effectiveness of dupilumab in reducing OCS use in patients with OCS-dependent severe asthma.

Methods: This retrospective, single-arm study analyzed data from the Avalere Claims database, a large US insurance claims database. Patients diagnosed with moderate-to-severe asthma (GINA 4/5) initiating dupilumab between November 1, 2018, and July 31, 2019, were included. Exclusion criteria were chronic obstructive pulmonary disease (COPD) diagnosis or treatment with another biologic for asthma in the previous year. There were 141 OCS-dependent patients included in this analysis (Table). The proportions of patients with any OCS use, mean annualized cumulative OCS dose, and percentage of patients with ≥ 90 days of OCS use were assessed pre and post 12 months of dupilumab initiation.

Results: Dupilumab significantly reduced the proportion of patients with any OCS use by 20.6% [P<0.0001], the mean annualized cumulative OCS dose by 33.4% [P<0.01], and patients with ≥ 90 days of OCS-