Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Introduction: Prior research suggests that there may be age-based differences in the presentation of anaphylaxis. However, the symptomatology of anaphylaxis in infants remains poorly characterized, and more research is needed to ensure accurate diagnosis and treatment.
Methods: This is a retrospective chart review of patients aged 0 - 24 months who presented to the emergency department (ED) of a pediatric tertiary referral center between Jun 2019 and Jun 2022 and met diagnostic criteria for anaphylaxis (n = 169). Demographics and clinical data, including presenting symptoms and treatment, were extracted from the medical record. Data were analyzed descriptively. The study was reviewed by the Institutional Review Board (IRB) and granted exemption.
Results: Among 169 patients, mean age was 1.0 years (SD = 0.42). 95 patients (56.2%) were 12 months or younger, and 109 (64.5%) were male. Almost all episodes were triggered by food (96.5%), especially egg (26.6%), peanut (25.4%), milk (13.6%), and cashew (10.1%). Symptoms were reported in the skin/mucosal (97.6%), gastrointestinal (74.6%), respiratory (56.8%), and cardiovascular (34.3%) systems. Most patients with cardiovascular symptoms had isolated tachycardia (84.5%). 146 patients (86.4%) received epinephrine, with 51 (30.1%) receiving it prior to arrival and 16 (9.5%) requiring more than 1 dose. 17 patients (10.1%) were admitted to the hospital, but none required intensive care.
Conclusion: In this cohort of infants with anaphylaxis, almost all episodes were triggered by food, especially egg, peanut, milk and cashew. Skin/mucosal and gastrointestinal symptoms were most common. Most patients received epinephrine, but few required hospital admission.

P015

PRE-VACCINE COUNSELING TO ASSIST WITH RISK ASSESSMENT PRIOR TO COVID-19 VACCINATION

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Introduction: During early vaccine roll-out of Pfizer-BioNTech, Moderna, and Johnson & Johnson (J&J) COVID-19 vaccines, reports of severe allergic reactions led to hesitancy among patients with allergic history and disorders. Evaluation was initially limited due to restricted access to vaccines and pandemic-associated clinical constraints.
Methods: We conducted a retrospective chart review of patients over 18 years of age who sought vaccine counseling in-person or by telehealth between December 1, 2020 and May 1, 2021 prior to their first dose of vaccine. Demographics, atopic history, anaphylaxis history and vaccine administration/reactions were recorded. Follow up phone calls were used to complete data collection.
Results: We identified 80 patients (N= 63 Female, 17 Male). The most frequently reported comorbidities included rhinitis (54%), asthma (36%), hypertension (21%), and chronic urticaria (21%). Twenty-six patients (33%) reported a history of anaphylaxis, 14 of which were attributed to medications. Of the 80 patients evaluated, 77 (93%) successfully completed a vaccination series (defined as 1 dose of J&J or 2 doses of an mRNA vaccine). Of the 77 patients that completed vaccination, 7 (9%) reported reaction to a dose of vaccine, all consistent with expected adverse effects. No reactions suggested anaphylaxis. Three patients elected not to receive vaccination; none of these patients had history of anaphylaxis.
Conclusion: Many patients with atopic history expressed hesitancy regarding COVID-19 vaccine administration and sought pre-vaccine counseling. Our experience suggests an effective role for counseling in patients with no prior exposure to COVID-19 vaccination as over 90% of patients with allergic history, including anaphylaxis, were safely vaccinated.

P016

LONG-TERM SAFETY IN ADULTS WITH MODERATE-TO-SEVERE ATOPIC DERMATITIS TREATED WITH DUPILUMAB UP TO 4 YEARS

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Introduction: In patients with atopic dermatitis (AD), classical immunosuppressive treatments are not recommended for continuous use due to safety concerns. This analysis reports long-term safety of dupilumab up to 4 years in adults with moderate-to-severe AD.
Methods: In the LIBERTY AD OLE (NCT01949311) study, adult patients ≥18 years old with AD initially received dupilumab 300mg weekly. 226 ongoing patients transitioned to 300mg every other week (q2w) to align with approved dosing. Use of topical corticosteroids (TCS) or calcineurin inhibitors was permitted. Treatment-emergent adverse events (TEAE) are reported as number of patients per 100-patient years (nP/100PY). Due to the lack of a control arm, LIBERTY AD CHRONOS (NCT02260986) 52-week safety results are provided.
Results: 2,207/1,065/557/362/352 patients completed up to 52/100/148/172/204 weeks of treatment. Mean (SD) treatment exposure was 103.4±57.8 weeks. Of the 2,677 patients included in the analysis, 2,273 experienced ≥1 TEAE (167.5 nP/100PY), which were mainly mild or moderate, and were lower than in the 300mg weekly + TCS arm of the 1-year CHRONOS trial (322.4 nP/100PY). 99 patients (1.8 nP/100PY) experienced TEAEs leading to treatment discontinuation. Of 536 patients reporting ≥1 event of conjunctivitis, 95% had mild (4.7 nP/100PY) or moderate (5.0 nP/100PY) severity. 89% of conjunctivitis events were resolved or resolving, and 0.5% (0.2 nP/100PY) led to treatment discontinuation. Efficacy was sustained and consistent with previous reports of this study.
Conclusion: The overall safety profile of dupilumab up to 4 years was consistent with the known safety profile and demonstrated sustained efficacy in adult patients with moderate-to-severe AD.

P017

COVID-19 VACCINE ADMINISTRATION IN PATIENTS WITH FIRST-DOSE ADVERSE REACTIONS OR HISTORY OF SEVERE ALLERGIC REACTION

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Introduction: The COVID-19 pandemic has claimed over 6 million lives from 2020 onward. Vaccines against SARS-CoV-2 are one of our best tools in preventing severe illness and mortality. There have been multiple reactions reported to the SARS-CoV-2 vaccine that initially precluded further revaccinations, making protection against the virus incomplete. Our study aimed to identify true SARS-CoV-2 vaccine reactions, underlying patient risk factors, and to confirm the safety of our vaccine challenge protocol for revaccination.
Methods: Patients with reported adverse first-dose SARS-CoV-2 vaccine reactions precluding second dose, or those with history of severe allergic reaction were given a graded vaccine challenge of an initial 10% dose, observed for 30 minutes, with advancement to the 90% dose if no concerning reaction.
Results: Of the 50 patients enrolled, 49/50 (98%) were able to obtain the full vaccine dose. 8 (16%) of patients had a first dose reaction concerning for delayed hypersensitivity, and 7/8 of those patients tolerated the full repeat vaccine dose. 42 (84%) patients had history of immediate reaction to the first dose of the vaccine and all tolerated the full dose via challenge protocol. 1/50 patients needed epinephrine, but was able to fully obtain the dose with outpatient treatment during the course, and subsequent revaccination.

Conclusion: In a monitored setting, this challenge protocol is safe and effective for patients with history of adverse reaction to the vaccine or an underlying history of severe allergic reaction that would traditionally preclude repeat vaccination. The mechanism and pathophysiology of these reactions need to be elucidated through further research.

P018

KNOWLEDGE OF ANAPHYLAXIS MANAGEMENT AMONG LATIN AMERICAN DENTISTS

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Introduction: Anaphylaxis is a severe and potentially life-threatening disorder that could occur in dental practice and can be triggered by antibiotics, chlorhexidine, local and general anesthetic and latex. The aim of our study is to assess the knowledge of anaphylaxis management among Latin American dentists.
Methods: A cross-sectional study using a validated web-based survey. All statistical analyses were performed using Stata. Descriptive and univariate and multivariate logistic analysis were used to determine potential associations.
Results: A total of 480 board-certified dentists completed the survey. The mean age was 35±10 years. 59.3% were female, and 49.2% were general dentists. The mean of professional experience was 10± 9 years. 21.3% had seen a patient with a systemic reaction caused by local anesthesia, 85.2% identified dyspnea as a major clinical manifestation of anaphylaxis, 56.7% knew epinephrine was the drug of choice to treat anaphylaxis, 50.1% of them knew the correct route of administration, and 43.5% had it in their office as part of an emergency medicine kit. Dentists who identified dyspnea as a symptom of an anaphylactic reaction was associated with increased odds of knowing that epinephrine is the drug of choice to treat anaphylaxis (OR=1.73), and age (OR=0.97) was associated with lower odds of knowing that epinephrine is the drug of choice.
Conclusion: The barriers regarding the proper and timely identification of anaphylaxis remain a problem. These findings reinforce the need to increase diffusion regarding clinical criteria of an anaphylactic reaction and its correct management.

P019

IMMUNIZATION STRESS-RELATED RESPONSES DURING SKIN TESTING AND CHALLENGE TO COVID-19 VACCINES: A CASE SERIES

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Introduction: While IgE-mediated hypersensitivity to COVID-19 vaccines may occur, many adverse reactions (ARs) to COVID-19 vaccination are non-immunologic in nature and meet criteria for immunization stress-related response (ISRR).
Methods: Patients were referred to our allergy clinic for skin testing (prick with undiluted vaccine, intradermal with 1:100, 1:10, and undiluted vaccine) and graded challenge with COVID-19 vaccines (Pfizer, Moderna, or Johnson and Johnson) between July 2021 and June 2022. ARs were documented and treated accordingly. ARs were characterized as ISRR based on the World Health Organization diagnostic criteria or non-ISRR if symptoms were outside those criteria.
Results: 83 patients underwent skin testing (ST) and/or graded challenge (GC) with COVID-19 vaccines in our office. Twenty-six (31.3%) patients had one or more symptoms of AR in the immediate period following ST/GC while 57 patients completed vaccination without any AR. 15 patients (1 to ST, 14 to challenge dose) had symptoms consistent with ISRR. 14 of these patients completed full vaccine dose. No patients had any significant objective changes in physical exam. 11 patients had ARs not meeting ISRR criteria. The most reported symptom in this cohort was subjective pruritus. 6 of these patients were able to complete full vaccination dose.
Conclusion: Most patients with AR consistent with ISRR successfully completed full COVID-19 vaccine administration. Some patients with symptoms suggestive of histamine-mediated reaction had no objective findings and were also able to complete vaccination. Our experience highlights the need to consider ISRR in evaluation of vaccine reactions and supports the safety of COVID-19 vaccination in patients with ISRR.

Table 1. Patients with In-Office Adverse Reactions

	Symptoms	Completed vaccine?
ISRR		
1	Sore throat and headache within 5 minutes of challenge dose	Yes
2	Tremulousness	Yes
3	Slight chest tightness, no objective wheezing or respiratory distress	Yes
4	Right cheek numbness	Yes
5	Subjective ear itching, slight redness noted on shoulder following intradermal 1:1 skin test	Yes
6	Tingly sensation	Yes
7	Slight cough, sensation of postnasal drip	Yes
8	Numbness/tingling of face and lips	Yes
9	Headache	Yes
10	Headache	Yes
11	Pain in arm at site of injection, slightly increased macular erythema of bilateral arms, pruritus of arms and legs. After second challenge dose, visual light sensation, and anxiety. Hypertension noted at baseline, stable throughout visit.	Yes
12	Dull headache, warmth in back, mild tingling in back of throat	Yes
13	Mild headache	Yes
14	Lip tingling	Yes
15	Tingling on right side of face	No
Non-ISRR		
16	Subjective pruritus	Yes
17	Subjective mouth and throat pruritus	Yes
18	Pruritus of palms	Yes
19	1 urticarial lesion noted	Yes
20	Pruritus of throat and ears	Yes
21	Angioedema of lip following intradermal 1:100 skin test	Yes
22	Chest tightness and trouble breathing	No
23	Chest tightness and pruritic skin	No
24	Generalized pruritus, objective flushing, pruritic throat	No
25	Chest tightness, difficulty swallowing; treated with intramuscular epinephrine	No
26	Coughing, generalized pruritus following skin prick test	No

All reactions occurred following a challenge vaccine dose unless otherwise noted.

P020

SYSTEMIC LUPUS ERYTHEMATOSUS IS ASSOCIATED WITH INCREASED RISK FOR RADIOCONTRAST ALLERGY

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Introduction: Systemic lupus erythematosus (SLE) is a chronic autoimmune condition that can manifest in multiple organs. Imaging is common to confirm systemic involvement of disease and may frequently require the use of radioactive contrast. Hypersensitivity reaction to radioactive contrast media and dye is rare but moderate to severe reactions can complicate a patient's clinical course. Immunologic dysregulation plays a significant role in both SLE and radiocontrast allergy. We investigate the association between contrast allergy and SLE in this study using a large nationwide database.
Methods: All adults >18 years hospitalized between 2008-2014 were selected from the National Inpatient Sample (NIS) database. Patients with radiocontrast allergy, SLE, drug allergy, food allergy, obesity, eczema, asthma, allergic rhinitis were identified using ICD-9 CM codes. The prevalence of SLE was compared in patients with and without radiocontrast allergy. A survey-weighted logistic regression model was used to describe the association between contrast allergy and SLE independent of age, race, sex, obesity, drug allergy, food allergy, eczema, asthma, and allergic rhinitis.