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.

plex Virus (HSV) 1/2 testing was negative. She was treated supportively with oral steroids, topical anesthetic, non-steroidal anti-inflammatories (NSAIDs), and sitz baths. With 10 days of steroids, symptoms improved. At 3 weeks, ulceration had healed with small residual scar. Case 2: 4 days after COVID-19 diagnosis, a 19-year-old presented to the ED, with a progressively painful vulvar lesion. We identified a unilateral vulvar aphthous ulcer with shallow lesion with ragged borders. She denied prior sexual activity, abuse or trauma. HSV testing was negative. She was treated supportively with topical anesthetic, NSAIDs, and sitz baths. Symptoms resolved within 2 weeks, with residual scar at 3 weeks. Case 3: 4 days after receiving second dose of Pfizer-BioNTech COVID-19 vaccine, a 16 year old presented to the ED with dysuria, vulvar pruritus, vulvar discharge, and labial swelling. She denied prior sexual activity. At follow up 1 day later in pediatric gynecology office, she had bilateral "kissing lesions" with punched-out appearance and necrotic eschar. Testing for HSV1/2, Epstein-Barr, mycoplasma, and cytomegalovirus were negative. She was treated supportively with topical steroids and NSAIDs with resolution of symptoms within a week.

Comments: These cases add to the growing body of literature describing acute vulvar aphthous ulcers as COVID-19 infection sequelae. To our knowledge this is the first case report of vulvar aphthous ulcer following COVID-19 vaccination. Non-sexually acquired vulvar aphthous ulcers remain a diagnosis of exclusion but testing for associated viral infections is not always performed. Affected patients often present to EDs for care. In the young child, multidisciplinary supportive care can be helpful in avoiding admission for sequelae like urinary retention. In this time of pandemic, testing for COVID-19 infection or inquiring about recent COVID-19 vaccination should be considered in all young women presenting with acute genital ulcerations.

Experience at a Multidisciplinary Pediatric Vulvar Dermatology Clinic

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Background: Vulvar dermatology is a field in which pediatricians, gynecologists, adolescent medicine specialists, and dermatologists may lack sufficient comfort and training. Delays in diagnosis can prolong patient discomfort and result in irreversible anogenital anatomic changes. Relatively few multidisciplinary vulvar dermatology clinics exist in the United States. We present our preliminary experience at a multidisciplinary pediatric gynecology and dermatology clinic for pediatric and adolescent vulvar disorders.

Methods: After IRB approval, we retrospectively collected data from 180 patients seen over a 4.5-year period from January 2016 to June 2020 in a joint dermatology-gynecology clinic at a metropolitan area children's hospital. Statistical analysis was performed using SPSS version 22.0 (IBM Corp, Armonk, NY).

Results: The most common diagnoses were lichen sclerosis (LS) (n= 59, 33%), non-specific vulvovaginitis (n=20, 11%) and vitiligo (n= 17, 9%) (Table 1). The mean age at the time of the first clinic visit was $7.9 + 4.7$ years. The mean age at diagnosis was $8.1 + 2.9$ years for LS, $6.1 + 2.4$ years for vulvovaginitis, and $6.2 + 2.3$ years for vitiligo. The median time from onset of symptoms to diagnosis of LS was 12 months (range 0.25 to 96 months). Although African Americans experienced longer times to diagnosis of LS and vitiligo as compared to other races, the difference was not statistically significant (Table 2). Lichen sclerosis and vitiligo were most commonly misdiagnosed as each other. Four (7%) patients with LS had been previously misdiagnosed with vitiligo. Seven (41%) of patients with vitiligo had been previously diagnosed with LS.

Conclusions: Lichen sclerosis, vitiligo, and non-specific vulvovaginitis are common diagnoses in children with vulvar complaints. There remains difficulty with differentiating between vitiligo and LS prior to referral to specialized centers. In children, there is a relatively long delay between the onset of symptoms and the diagnosis of LS, which although not statistically significant, is greater for African Americans. Future studies are needed to address provider education for the diagnosis of pediatric vulvar disorders and to assess the potential association between access to care and diagnostic delays in the management of pediatric vulvar disorders.

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Post COVID-19 Vaccination Vulvar Aphthous Ulcers: An Unpopular Case Series

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Background: Vulvar aphthous ulcers have been described since the early 1900s. These non-sexually acquired genital ulcers typically appear in the perimenarchal population as 1-3 painful ulcers that spontaneously resolve within 21 days. Etiology is not completely understood but there is believed to be a large immunologic component given a high association with a recent viral infection. With the COVID-19 pandemic, our institution saw COVID associated aphthous ulcers. After increased use of the Pfizer vaccine in those 12 years old and over, our institution also saw a series of post vaccination aphthous ulcers.

Case: At our tertiary care children's hospital the division of pediatric and adolescent gynecology saw three patients from 6/2021 through 9/2021 presenting with vulvar aphthous ulcers all of whom were recently given their second COVID-19 Pfizer vaccination. Patients ranged from age 12 to 15 years old and were both pre- and post-menarchal. None of the patients to their knowledge had a history of COVID or a recent COVID exposure. In addition, there were no recent symptomatic viral illnesses. Of those who agreed to cytomegalovirus (CMV) and Epstein-Barr Virus (EBV) testing, all were negative. These patients had all received their first dose of the Pfizer vaccine without complications and were all 2 days post second vaccine when they first noticed pain. On average, they presented to the emergency room within 24-48 hours of presentation of symptoms and had gynecologic follow-up within 48 hours. Physical exam was consistent with a diagnosis of vulvar aphthous ulcers with no exceptional characteristics. There were multiple ulcerations with fibrinous exudate and some with necrotic islands. All resolved spontaneously by 3 weeks and no further follow-up was needed. There were no diagnoses of COVID-19 infection after the diagnosis of the aphthous ulcer.

Comments: The COVID vaccine is safe and efficacious for protection against COVID-19. National organizations such as American College of Obstetricians and Gynecologists (ACOG), Society for Maternal-Fetal Medicine (SMFM), American Academy of Pediatrics (AAP), and North American Society for Pediatric and Adolescent Gynecology (NASPAG) have endorsed vaccination in their respective audience. Specifically, AAP and NASPAG have encouraged eligible patients 12 through 16 to receive the Pfizer COVID-19 vaccination. Although this is a series of adverse outcomes post COVID-10 vaccination, it does shed light on the multifaceted immune response one gains from a COVID-19 mRNA based vaccine. In addition, this series further supports the long-held belief that vulvar aphthous ulcers are an immunologic response rather than a sign of a genital infection themselves.

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