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Editorial

The role of the dermatologist in the return of measles



Measles has returned to the international spotlight as a public health concern and is on the radar of dermatologists, who are a first-line resource in identifying one of the cardinal signs of the disease: rash. Measles was only officially eradicated in the United States in 2000 but has since made a resurgence, with 1282 cases reported in 2019, the highest number of cases since 1992 ([Centers for Disease Control and Prevention, 2018, 2019a, 2019b](#)). In 2018, 375 cases were reported ([CDC, 2019a](#)). Generally, new patients with measles are unvaccinated and were exposed to measles while traveling abroad or acquired it through spread within unvaccinated communities ([CDC, 2019a](#)).

What is the role of the dermatologist in the return of measles? The primary focus from a health care perspective is to promote prevention (i.e., vaccination). Primary vaccination and follow-up for the second vaccine in the measles, mumps, and rubella (MMR) series are to be encouraged. Often this is part of routine pediatrics practice. Based on kindergarten vaccination rates for the 2018–2019 schoolyear, 94.7% of students had two doses of the MMR vaccine, with an exemption rate of 2.5% (0.3% medical, 2.2% nonmedical; [Seither et al., 2019](#)). There is local, state, and even regional variance in vaccination rates, as evidenced by the New York State/Rockland County and New York City outbreaks of 2019 ([CDC, 2019b](#)).

Thus, for dermatologists who care for patients of all ages, from children to adults, this is a prime opportunity to ask about vaccinations and encourage getting the vaccination or completing the measles vaccination series. Many dermatologists are already participating in the Merit-based Incentive Payment System, and a prime example of one of the quality measures is collecting data on whether patients aged ≥ 65 years have received the pneumonia vaccine. Similarly, we may routinely ask about other vaccinations, such as the MMR vaccine. Asking may invite a brief conversation about vaccination, which may lead to a positive intervention.

Dermatologists should be aware of the basics of the vaccine and administration to properly guide patients and their families. Generally, the MMR vaccine can be given to those aged ≥ 12 months. The first dose generally is given at 12 to 15 months and a second dose at 4 to 6 years ([Drutz, 2020](#)). Postexposure prophylaxis may be given to children without immunity and may be administered in the form of the MMR vaccine or immune globulin ([Drutz, 2020](#)). Catch-up immunization is recommended for those without a history of immunization or with unknown status, which requires two doses of the vaccine. Patients born before 1957 are thought to be immune, so this population may be excluded from a discussion on vaccination ([Hibberd, 2020](#)).

The second focus of the dermatologist is be aware of the disease state and be prepared to deal with its return. We need to be equipped to care for patients with measles by accurately diagnosing, reporting, and treating them. Furthermore, we need to be prepared for other considerations with measles affecting a portion of our patient population. In this issue's Art of Prevention series, we highlight measles. In "The Importance of Measles Recognition and Vaccination," we have the opportunity to refresh ourselves on the disease state, how to recognize measles, and what to do if we encounter a potential case. An algorithm recommended by the CDC is featured. The subject of vaccination, with proponent and antivaccination viewpoints, is also broached.

The second article in the series features "Our Approach to the Measles-Mumps-Rubella (MMR) Vaccine in Adult Patients Vaccinated Against Measles Before 1968 on Biologic Therapy for the Treatment of Psoriasis," a topic appropriate because we have to be aware of what ramifications measles will have on our dermatology patient population. We commonly use biologic agents for the treatment of skin disease, and its management includes screening and vaccination for infectious disease. This article reviews not only the usage of live-attenuated vaccines in patients with psoriasis on biologic agents and addresses the use of the MMR vaccine in this population.

In addition to the information presented in these articles, it is useful to point out some salient points that may come up in the daily practice of dermatology. Because dermatologists are skilled in using a variety of immunosuppressants, we may encounter situations in which we may need to have patient discussions on the MMR vaccine and exposure to measles. Patients with immunodeficiency are prohibited from immunization because the MMR vaccine is a live attenuated viral vaccine; this includes patients on systemic immunosuppression, such as those on corticosteroids ≥ 2 mg/kg/day for ≥ 2 weeks ([American Academy of Pediatrics, 2018](#)).

Furthermore, patients with severe immunosuppression require postexposure prophylaxis with intravenous immunoglobulin ([American Academy of Pediatrics, 2018](#)). Although this issue is debatable in the field of dermatology, based on some gastroenterology literature, patients may be considered immunosuppressed while on a biologic agent ([Reich et al., 2016](#)). We may consider getting serology prior to initiation of systemic immunosuppressants or biologic agents and recommend the MMR vaccine if there has been no such therapy in the past 3 months and therapy is not planned for the following 6 weeks ([Reich et al., 2016](#)). For patients on therapy, a break of 3 months prior to vaccination is recommended ([Reich et al., 2016](#)). Family members of immunosuppressed patients may receive the vaccine at any time ([Reich et al., 2016](#)).

Armed with this knowledge, dermatologists can be proponents of measles vaccination and can encourage their patients to be vaccinated, backing up their rationale with science and data. In addition, dermatologists can be available first-line medically due to awareness of the disease and can ensure adequate evaluation and management of patients with measles. Furthermore, they can readily identify issues due to the resurgence of measles in the population and how it affects nonaffected patients, particularly those who are immunosuppressed or on biologic agents. Ultimately, our role as dermatologists will aid in ongoing public health efforts to respond to and quell the resurgence of measles.

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