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.

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COMMENTS

Radiation Recall Phenomenon Following COVID-19 Vaccination

To the Editor: Recently in the *International Journal of Radiation Oncology Biology Physics,* Soyfer et al described the first 2 cases of radiation recall phenomenon (RRP) after administration of a COVID-19 vaccine.[1] Both patients had been vaccinated with the Pfizer-BioNTech mRNA vaccine, and the cutaneous manifestations were reportedly observed 5 and 6 days after the second vaccination, which is scheduled 3 weeks after the initial inoculation. Two other case reports of RRP have subsequently emerged, including a case of dermatitis with the Sinovac vaccine (inactivated virus)[2] and a case of pneumonitis after the Moderna mRNA vaccine.[3] In the Sinovac case, the skin changes were reported 5 days after the initial inoculation.

We have also recently seen a case of RRP after administration of the AstraZeneca vector vaccine, the most common vaccine currently used in patients >50 years old in Australia. Curiously, our patient described rather rapid onset of symptoms after the first of the 2 planned vaccinations, which are scheduled 3 months apart. Six months earlier, our 57-year-old patient had completed 66 Gy in 33 fractions of adjuvant radiation therapy for an acinic cell carcinoma of the right parotid gland with intensity modulated radiation therapy without bolus. Within 3 hours of her initial injection, she reported onset of pruritus and mild erythema over the right upper neck. Over the next 3 weeks the symptoms continued to increase in intensity, resulting in a clearly demarcated area of skin erythema (Fig. 1A-C). At week 3, marked erythema and dry desquamation was localized to the right periauricular and submandibular area (Fig. 1C), corresponding to a skin dose of approximately 55 Gy (Fig. 1D). Her symptoms were initially managed with simple analgesia and protective dressings. After application of topical hydrocortisone at week 3, the patient self-reported a reduction in local discomfort and pruritis and a reduction in the erythema over the subsequent days. During this period there was no evidence of an exacerbation of any other radiation-related sequelae. Additional advice regarding her next inoculation is awaited from a vaccine specialist.

RRP have now been rarely reported with most of the available COVID-19 vaccines, and dermatitis has been the most frequently reported manifestation. Although these cases are rare, medical practitioners should be aware of this potential self-limiting complication. Our case was notable

Figure.

Disclosures: None

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for it being the first case reported with the AstraZeneca vaccine and for its rapid onset after the first exposure.

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References

1. Soyfer V, Gutfield O, Shamai S, Schlocker A, Merimsky O. COVID-19 vaccine-induced radiation recall phenomenon. *Int J Radiat Oncol Biol Phys* 2021;110:957–961.
2. Afacan E, Öğüt B, Üstün P, Şentürk E, Yazıcı O, Adışen E. Radiation recall dermatitis triggered by inactivated COVID-19 vaccine [e-pub ahead of print]. Clin Exp Dermatol. doi:10.1111/ced.14786, accessed June 8, 2021.
3. Steber CR, Ponnatapura J, Hughes RT, Farris MK. Rapid development of clinically symptomatic radiation recall pneumonitis immediately following COVID-19 vaccination. *Cureus* 2021;13:e14303.

For the Love of Radiation Oncology: A Resident Trainee Perspective

To the Editor: Radiation oncology was considered among the most competitive specialties in medicine by most National Residency Matching Program (NRMP) metrics for over a decade, frequently attracting more applicants than available training positions.[1,2] However, recent years have seen radiation oncology residency spots going unfilled in the NRMP match. In the most recent NRMP cycle, of 188 positions offered, 38 (20.2%) went unfilled. The surplus of residency slots has led to disproportionate use of the Supplemental Offer and Acceptance Program (SOAP) compared with other specialties.[3,4]

The apparent oversupply of residency positions has generated concerns about the future of radiation oncology as a field. These include fears regarding future job prospects for current trainees, decreased compensation, and a loss of prestige as a specialty.[3,5-7] These concerns are amplified in often semi-anonymous posts purportedly written by current residents across various social media and SOAP-oriented online platforms, which have recently referred to radiation oncology as a "dumpster fire," "the worst field in medicine," and "a dying field." These and similar statements compelled us to defend our specialty. In spite of the high number of unfilled positions in The Match, increased use of the SOAP, and the fears surrounding our field, the authors of this letter firmly believe that radiation oncology remains an outstanding field in terms of its scope and impact.

It is imperative to remember that radiation oncology is foundationally a fantastic specialty. Recent circumstances do not diminish the good work that we do in seeing our patients through some of the most trying times of their lives. By acting as primary oncologists providing curative treatment, palliation, care coordination, and empathy, radiation oncology remains a noble calling that substantially benefits our patients. Confidence in this should outweigh nebulous concerns regarding decreased compensation and loss of status.

In our opinion, radiation oncology is and will remain a great calling. We hope to reframe the justified concerns of our colleagues and take the ongoing angst as an opportunity to better our beloved field. By increasing engagement of current trainees and having constructive discussions regarding concerns about our field, enhancing our role in medical education, expanding our relationships with other specialties and subsequently indications for radiation treatment, and appropriately and thoughtfully adjusting the number of training positions, we can make this great field even greater. It is with pride and excitement that we look forward to what the coming years' residents have in store for our future.

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References

1. Ahmed AA, Holliday EB, Deville C, Jagsi R, Haffty BG, Wilson LD. Attracting future radiation oncologists: An analysis of the National Resident Matching Program data trends from 2004 to 2015. *Int J Radiat Oncol Biol Phys* 2015;93:965–967.
2. Burt LM, Trifiletti DM, Nabavizadeh N, Katz LM, Morris ZS, Royce TJ. Supply and demand for radiation oncology in the United States: A resident perspective. *Int J Radiat Oncol Biol Phys* 2017;97:225–227.
3. Goodman CR, Sim A, Jeans EB, et al. No longer a match: Trends in radiation oncology National Resident Matching Program (NRMP) data from 2010-2020 and comparison across specialties. *Int J Radiat Oncol Biol Phys* 2021;110:278–287.
4. The Match National Resident Matching Program. Advance data tables: 2021 main residency match. Available at: https://mk0nrmp3oyqui6wqfm.kinstacdn.com/wp-content/uploads/2021/03/Advance-Data-Tables-2021_Final.pdf. Accessed April 7, 2021.
5. Shah C, Royce TJ. Chicken little or goose-is-cooked? The state of the US radiation oncology workforce: Workforce concerns in U.S. radiation oncology. *Int J Radiat Oncol Biol Phys.* 2021;110:268–271.
6. Kahn J, Goodman CR, Albert A, et al. Top concerns of radiation oncology trainees in 2019: Job market, board examinations, and residency expansion. *Int J Radiat Oncol Biol Phys* 2020;106:19–25.
7. Pan HY, Haffty BG, Falit BP, et al. Supply and demand for radiation oncology in the United States: Updated projections for 2015 to 2025. *Int J Radiat Oncol Biol Phys* 2016;96:493–500.