Such rare, atypical forms of orf are frequently associated with the use of posttransplantation immunosuppressants, such as glucocorticoids, cyclosporine, and tacrolimus. Clinically, the patients often present with pyogenic granuloma-like lesions, as noted in our case.

Treatment of giant orf tumors in immunocompromised individuals typically relies on surgical excision, which is often followed by rapid postoperative recurrence. To spare patients unnecessary surgeries, a number of topical medications such as idoxuridine, cidofovir, and imiquimod have been documented. Among them, imiquimod cream alone or as an adjuvant with surgery appears to have lower recurrence rates, making it the most commonly used topical treatment in recent years.

In the present case, our new, nonsurgical, combined antiviral strategy was based on the following information: (1) Both idoxuridine and acyclovir are nucleoside analogues that competitively inhibit viral DNA polymerases; thus they are used as common antiviral drugs for treatment of different herpesvirus infections. (2) Interferon alpha, in addition to its well-known antiviral properties, has strong antiproliferative and antiangiogenic effects by downregulating vascular endothelial growth factor, which makes it a strong candidate to treat our patient with highly vascularized orf tumors. In view of this information, we started treating the patient with the experimental combined therapy of oral acyclovir and intralesional interferon alpha-2b.

This strategy is minimally invasive and has mild adverse effects. Our patient experienced only low-grade (<38°C), manageable fever at the first night of each injection. Furthermore, the combined therapy took only 6 weeks to completely clear the lesions—one of the shortest recovery periods reported to date (compare several recent imiquimod cream studies, which have reported complete resolution within 6-17 weeks). Nevertheless, further follow-up will be important to find possible signs of orf relapse. More studies are required to confirm the actual effectiveness of acyclovir to inhibit orf virus.

Menglong Ran, MD
Mingyang Lee, MD, MS
Jie Gong, PhD
Zhimiao Lin, MD
Ruoyu Li, MD

Author Affiliations: Department of Dermatology, Peking University First Hospital, Beijing, China (Ran, Lee, Gong, Lin, Li); Beijing Key Laboratory of Molecular Diagnosis on Dermatoses, Beijing, China (Ran, Lee, Gong, Lin, Li); Research Center for Medical Mycology, Peking University, Beijing, China (Gong, Li).

Corresponding Author: Zhimiao Lin, MD, Department of Dermatology, Peking University First Hospital, 8 Xishiku St, Xicheng District, Beijing 100034, China (zhimiaolin@bjmu.edu.cn).


Author Contributions: Authors Ran and Lee contributed equally to this report.

Conflict of Interest Disclosures: None reported.

Funding/Support: This work was supported by grant YETPO069 from the Beijing Higher Education Young Elite Teacher Project (Dr Lin).

Role of the Funder/Sponsor: The Beijing Higher Education Young Elite Teacher Project had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

Ex Vivo Fluorescence Confocal Microscopy of Eccrine Syringomatous Carcinoma: A Report of 2 Cases

Eccrine syringomatous carcinoma (ESC) is a rare malignant adnexal skin tumor derived from sweat glands that occurs in middle-aged patients. Clinically, ESC is usually seen as a slow-growing, solitary, flesh-colored nodule or plaque with ill-defined margins. Because ESCs tend to infiltrate far beyond the visible margins of the lesion, surgical excision under Mohs microscopic control must be performed.

Ex vivo fluorescence confocal microscopy (FCM) has been introduced as a novel imaging technique that permits quick and complete imaging of the tumor margins on fresh tissue excisions from Mohs surgery. In this case series, we aimed to report the application of FCM for ESC diagnosis and margin assessment.

Report of Cases | Case 1. A man in his 60s sought consultation for the presence of a growing, solitary, flesh-colored patch located on his scalp with shading of margins. Dermoscopically, the lesion revealed a vascular pattern with blurred arborizing vessels overlying a whitish background. A provisional diagnosis of epithelial tumor was made, and Mohs surgery using FCM was scheduled. Fresh excised tissue was processed for FCM as described elsewhere. After FCM imaging, the specimen was processed for conventional frozen-section and definitive histopathologic examination.

On FCM, the tumor appeared as a dermal proliferation of highly fluorescent cells. The overlying epidermis was spared by any neoplastic proliferation and not ulcerated. At higher magnification, the tumor was made up of neoplastic cords of monomorphic fluorescent cells similar to eccrine gland tubular structures. All margins were clear at first staging. Histopathologic examination confirmed the diagnosis of an ESC.

Case 2. A woman in her 50s was referred for the presence of a long-standing whitish patch located on the right side of her nose (Figure, A). Dermoscopically, pinkish arborizing vessels were observed (Figure, B). Since the margins were clinically indistinct, Mohs surgery with FCM was performed. Central section of the tumor revealed the same pattern observed in case 1, and the diagnosis of ESC was made on FCM images.

Additional Contributions: We are grateful to the patient for participation in this study.


Interestingly, 1 margin was found to be positive for the presence of tumor cells (Figure, C and D); thus, a second staging was performed to obtain a clear margin (Figure, E and F). Histopathologic examination confirmed the complete excision and the diagnosis of ESC with an excellent correlation with the FCM analysis.

**Discussion** | Fluorescence confocal microscopy is a novel technique that can speed up Mohs surgery procedures in the context of epithelial tumors. It allows imaging of large areas of tissue with a high resolution, similar to that seen in histopathologic samples. Herein, we report 2 cases of ESC, a rare malignant adnexal tumor, in which FCM allowed rapid assessment of the clearance of the margins during Mohs sessions.

As a first step, on FCM images it was possible to understand the epithelial origin of the tumor because of the presence of fluorescent tumoral structures forming cords or single cells located in the mid-dermis. Of note, the neoplastic proliferations did not show any peripheral palisading. Although an exact diagnosis of ESC was not possible in case 1 owing to the rarity of the tumor and thus the relatively scarce experience of the FCM reader, the lesion was provisionally identified as an epithelial tumor. Interestingly, case 2 was correctly...
Diagnosed as ESC on FCM. As a second step, the clearance of the margins was easily assessed on FCM.

Our experience with FCM in ESC suggests the possibility of its application in several settings. Moreover, we provide the morphologic description of FCM findings in ESC that can help to build up a complete semiology for this new intriguing technique.

Caterina Longo, MD, PhD
Moira Ragazzi, MD
Stefano Gardini, MD
Elvira Moscarella, MD
Giuseppe Argenziano, MD

Author Affiliations: Skin Cancer Unit, Arcispedale Santa Maria Nuova IRCCS, Reggio Emilia, Italy (Longo, Gardini, Moscarella); Pathology Unit, Arcispedale Santa Maria Nuova IRCCS, Reggio Emilia, Italy (Ragazzi); Dermatology Unit, Second University of Naples, Naples, Italy (Argenziano).

Corresponding Author: Caterina Longo, MD, PhD, Skin Cancer Unit, Arcispedale Santa Maria Nuova IRCCS, Viale Risorgimento, 80, 42100 Reggio Emilia, Italy (longo.caterina@gmail.com).


Conflict of Interest Disclosures: None reported.


COMMENT & RESPONSE

Radiation Oncologist Concerns About Increased Electronic Brachytherapy Use for Skin Cancer

To the Editor As Fellows in the American Society for Radiation Oncology (ASTRO), the world’s leading radiation oncology society, we commend the caution and concern raised by Linos et al1 in “A Sudden and Concerning Increase in the Use of Electronic Brachytherapy for Skin Cancer.”1 The recent sharp increase in use of electronic brachytherapy (EBT) for patients with nonmelanoma skin cancer and the possible abuse of the physician self-referral law are indeed troubling developments. The authors’ confirmation of the dramatic increase in EBT use are reminiscent of the alarming reports by the Government Accountability Office (GAO)2 and Mitchell3 regarding overutilization of intensity-modulated radiation therapy (IMRT) for prostate cancer. These earlier reports confirmed abuse of the in-office ancillary service (IOAS) exception to the Stark law,4 the federal physician self-referral law.

The GAO report5 detailed a 356% increase in IMRT treatments from 2006 through 2010 and directly attributed the increase to self-referral abuse. The Mitchell3 study found a 146% increase in IMRT by physicians who self-referred their patients for IMRT treatment from 2005 to 2010. Conversely, IMRT use among non-self-referrers increased by only 1.3% during the same period. Together, these studies quantify an enormous ethical breach of patient trust and demonstrate that profit is eclipsing patient care. ASTRO is working diligently to close the IOAS exception to protect patients and to reduce unnecessary utilization and costs of services.

Linos et al2 also identified potential misuse of additional Current Procedural Terminology (CPT) codes for services performed in conjunction with EBT. ASTRO supports modifications to CPT codes that would decrease potential incentives for clinicians to administer unnecessary services and thus incur unnecessary costs.

Finally, Linos et al1 questioned the lack of long-term safety and efficacy data to confirm that EBT outcomes meet or exceed the current standard of care. Likewise, ASTRO supports stringent data standards to inform treatment guidelines. For skin cancer, there are abundant data demonstrating excellent long-term outcomes from low-energy x-ray treatments delivered by non-EBT devices. There is no reason to expect that EBT devices will perform differently, given the identical nature of the treatment modalities, but long-term data are necessary.

ASTRO strongly supports and encourages multidisciplinary care, whereby the oncology care team provides recommendations regarding multiple treatment options. Cancer is a complex disease, and treatment should be evidence based and in the best interest of each individual patient. Thank you, Linos and colleagues, for your measured and sound viewpoint focused on the best and highest-quality care for patients with cancer.

Bruce G. Haffty, MD
David C. Beyer, MD
Brian D. Kavanagh, MD, MPH

Author Affiliations: Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey, New Brunswick (Haffty); Rutgers Robert Wood Johnson Medical School, State University of New Jersey, New Brunswick (Haffty); Arizona Oncology Services Physicians, Phoenix (Beyer); Department of Radiation Oncology, University of Colorado School of Medicine, Denver (Kavanagh).

Corresponding Author: Bruce G. Haffty, MD, Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey, 195 Little Albany St, Rm 2012, New Brunswick, NJ 08903 (haffthybg@cinj.rutgers.edu).


Conflict of Interest Disclosures: None reported.