CASE REPORT

Patient health-seeking behavior on WeChat: Social media and dermatology

Andrea Tan, BS,a,b Daniel Gutierrez, MD,a Emily C. Milam, MD,a Andrea L. Neimann, MD,a and John Zampella, MDa

New York, New York and Dallas, Texas

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INTRODUCTION

The increasing presence of social media in dermatology has led to fundamental changes in how patients interact with the health care system. We present a case of a health-related pitfall associated with this technological shift.

CASE REPORT

A 33-year-old Chinese woman presented with worsening forehead redness and pain in the setting of filler injection. The patient reported using the Chinese-based multipurpose social media application WeChat to locate an unlicensed individual who traveled to her home in the United States to inject a hyaluronic acid filler, Neuramis Volume Lidocaine (Medytox, Inc, Seoul, Republic of Korea), into her glabellar complex. She reported previous cosmetic procedures arranged through WeChat without complications. Two days after the filler injection, she reported duskeness with pain of the forehead. She used WeChat to recontact the individual, who injected hyaluronidase and administered oral trimethoprim-sulfamethoxazole 80 mg/400 mg daily, aspirin 325 mg daily, and sublingual nitroglycerin 0.4 mg daily. The patient received 2 additional hyaluronidase injections over 2 days, with continued worsening of symptoms and swelling of the eyelids and periorbital area. Subsequent attempts to contact the injector were unsuccessful. She denied fevers or chills, pain with ocular movements, blurry vision, or headaches.

Physical examination showed mottled, reticulated, minimally blanching erythema from the left frontal aspect of the scalp line extending across the left forehead, temple, supraorbital area, and left eyelid with associated swelling and mild tenderness (Fig 1). Superior to the left eyebrow was an angulated necrotic eschar with mild warmth but no purulence.

The patient was admitted with concern for preseptal cellulitis and treated with intravenous vancomycin. Upon discharge, the treatment regimen was altered to doxycycline 100 mg twice daily and topical nitroglycerin 2% ointment every 2 hours. The patient reported improvement on follow-up 5 days after initial consultation. She was subsequently lost to follow-up.

DISCUSSION

Social media—web-based or mobile platforms that enable sharing of ideas and information—has facilitated an unprecedented level of interconnectivity and global networking and has changed how physicians and patients approach health care. This is especially true with regard to dermatology, given the visual nature of skin conditions.

For the dermatologist, social media platforms such as Facebook, Twitter, and Instagram can be effective marketing tools for clinical dermatologic practices and serve as avenues for patient feedback and continuing medical education. Dermatology journals and organizations with dedicated social media accounts can provide opportunities for patient education and knowledge dissemination.

For the patient, social media provides a conduit for medical knowledge acquisition, sharing of personal experiences, and physician referrals. A 2012
survey found that 42% of consumers have used social media to search for health-related information, and 45% reported that social media health information influenced decisions to seek care. However, online information may not always be medically accurate or provided by credible sources; a 2014 analysis of Instagram hashtags found that the vast majority of top dermatology-related posts are made by individuals without formal dermatology training. Efforts such as the #VerifyHealthcare campaign, which encouraged health care professionals to list credentials for social media transparency, aim to help differentiate medical information provided by licensed professionals from that of disreputable sources.

In this patient’s case, the social media platform used also has particular cultural relevance. WeChat (微信, Weixīn) is currently the most popular social media and multipurpose application in China and is one of the world’s largest mobile apps, with more than 1 billion monthly active users. Launched in 2011 by Chinese company Tencent Holding Limited, the application has grown into a comprehensive platform that provides not only text messaging, voice calls, and video conferencing but also offers broadcast messaging, location sharing, online games, mobile payments, online shopping, travel booking, and food delivery. Companies can create public accounts for clients to follow, receive promotional updates, and message. WeChat’s Moments function, conversely, allows users to share more private updates and photos with closed friend networks.

The intersection between WeChat and the health care field has also grown exponentially. WeChat users have cited Moments (70.54%), public accounts (53.36%), and group chats (31.17%) as their primary means of receiving health information. In 2014, Tencent launched WeChat Intelligent Healthcare, which allows users to find health practitioners, arrange online consultations, book appointments, and pay medical bills. Because of its widespread reach, WeChat has established itself as a global social media phenomenon. Despite its enormous user base, WeChat is still not widely known or used in Western countries outside of ethnically Chinese people living abroad. This discrepancy is reflected in the medical literature; the vast majority of publications discussing the increasing role of WeChat in patient health-seeking behavior and health information acquisition are published by Chinese authors and institutions, and only 1 article in the U.S. literature examines WeChat in dermatology. Similarly, literature on Neuramis Volume Lidocaine, a hyaluronic acid filler manufactured in Korea, is lacking.

In our multicultural and diverse society, individuals may gravitate toward what is culturally familiar to them. This case of a Chinese woman using WeChat to arrange injection of an Asian dermatologic product (unfamiliar to U.S. board-certified dermatologists) should be interpreted through the lens of cultural competency. Of U.S. minority groups, Asian Americans are reportedly the least likely to feel that their doctor understands their background and values and are the most likely to report that their doctor looked down on them. Given this sentiment and the current global dominance of the WeChat platform, Western physicians should be increasingly aware of its existence and should practice cultural awareness by remaining nonjudgmental and understanding of the sociocultural context behind Chinese patients who may use this app.

The potential of social media as a powerful tool comes with several pitfalls, some of which may have serious implications for patient health. This case highlights the increasing intersection between social media and patient health-seeking behaviors, especially in the field of dermatology. Dermatologists should remain up to date on these trends and advise patients to exercise caution when seeking information or services—especially with regard to invasive, potentially dangerous cosmetic procedures such as dermal filler. In this growing age of digital communication, physicians have an opportunity to actively participate in and drive these conversations and share health-related knowledge for patient education and engagement.

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