

Onconeurology and Nontraditional Media Education

By Mohamed E. Elrggal and Mohammed Abdel Gawad

The field of onconeurology has recently begun to take shape, and thus, education aimed at onconeurology is still evolving. Importantly, onconeurology was galvanized in the age of social media; thus, non-traditional media is playing a pivotal role in shaping education in onconeurology. For example, the American Society of Onconeurology (ASON) was largely materialized by a group of nephrologists all over the world using WhatsApp to discuss and share cases and forge research collaborations.

The first textbook devoted solely to onconeurology topics was published in 2005 (1) and subsequently, two additional in 2015 (2) and 2019 (3). In addition, the *Journal of Onco-Nephrology* was created in 2017, which represents a reliable source for onconeurology education. However, these forms of traditional media have taken a backseat to free open access medical education (FOAMed) in the last decade.

The first ASN Kidney Week session devoted to onconeurology was held in 2009. This was followed by the first pre-course in 2013 and yearly onconeurology symposia at various US centers thereafter. Kidney Disease Improving Global Outcomes (KDIGO) held its first onconeurology meeting in 2018. Findings presented at these meetings were best disseminated when the meeting policy allowed the audience to “live tweet” and share lectures’ contents.

Social media has revolutionized knowledge sharing and education in nephrology, including onconeurology, over the last decade (4). The use of tools, such as Twitter, Facebook, WhatsApp, Slack, and others, has enhanced knowledge exchange, promoted education, and encouraged global collaboration and research (5). Moreover, visual abstracts, videos, podcasts, and spaces have provided more social media engagement than text alone (6). In addition, interactive events, such as online journal clubs, help to disseminate recent advances in medicine (7), and interactive online educational games and online mentorship programs generate interest in the nephrology specialty.

The onconeurology specialty made the best use of FOAMed tools. The interest and education in this field have flourished using social media tools. For example, searching Twitter, using the hashtag #onconeph or #onconeurology, will direct you to hundreds of tweets and tweetorials discussing cases, new articles, webinar slides, and conference materials. Blogs, such as *American Journal of Kidney Diseases (AJKD)* Blog, Renal Fellow Network, and NephSIM, contain articles, quizzes, and featured contents specifically for onconeurology. YouTube channels, such as GlomCon and others, contain recorded videos discussing various aspects of onconeurology. Podcasts, such as “Checkpoint NOW,” are available for listening and learning anytime. See Table 1 for a complete list of available FOAMed tools and links.

As the field emerges with a limited number of practicing onconeurologists at present, social media tools are needed and are already helping to connect onconeurologists across the globe and to promote education and collaboration. A recent study found that WhatsApp semi-private messaging

in a private onconeurology group led to an overall positive learning experience (8).

Hopefully, onconeurology is ripe for more educational innovations in the future. An online onconeurology game, such as NephMadness, can be a great way to increase interest in the subspecialty. An online onconeurology YouTube channel may further increase the learning experience for those interested in the field, and an online certificate in onconeurology is not far from reality. Moreover, education can be expanded to provide additional mentoring to trainees who may aspire to virtual fellowship and training. ■

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Table 1. FOAMed tools in onconeurology

Twitter	#onconeurology and #onconeph Tweetorials: Renal Fellow Network (RFN): https://www.renalfellow.org/have-a-question-there-might-be-a-tweetorial-for-that/ Monoclonal gammopathy of renal significance (MGRS): https://twitter.com/AliMehdiMD/status/1304394512450584576 Cryoglobulinemia: https://twitter.com/aishaikh/status/1367541786860740611 Cyclin-dependent kinase (CDK) 4/6 inhibitors induced acute kidney injury (AKI): https://twitter.com/ShrutiGkidney/status/1468584593108488194 Nephrotic syndrome after hematopoietic stem cell transplant (HSCT): https://twitter.com/AIJurdi/status/1275896844799733761
Blogs	AJKD: https://ajkdblog.org/tag/onconeurology/ RFN: https://www.renalfellow.org/
Podcasts	Checkpoint NOW about onconeurology and immune-mediated nephrotoxicity: https://podcasts.apple.com/ro/podcast/episode-11-onco-nephrology-and-immune-mediated/id1541046019?i=1000516866525&l=ro
Journals	Journal of Onco-Nephrology: https://journals.sagepub.com/home/jnp
Visual abstracts	Examples: Clinical Journal of the American Society of Nephrology: https://cjasn.asnjournals.org/content/16/9/1318?with-ds=yes Advances in Chronic Kidney Disease: https://www.sciencedirect.com/science/article/pii/S1548559521000975
YouTube	GlomCon: https://www.youtube.com/c/GlomerularDiseaseStudyTrialConsortium/search?query=onconeurology



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