The Rise of the Social Pathologist

The Importance of Social Media to Pathology

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Transport of mails, transport of the human voice, transport of flicking pictures in this century as in others—our highest accomplishments still have the single aim of bringing men together.

Antoine de Saint-Exupéry, 1939

Be civil to all; social to many; familiar with few; friend to one; enemy to none.

Benjamin Franklin

Most people reading this editorial are older than 55 years and have the paper version of Archives of Pathology & Laboratory Medicine in hand. You surf the Web for news, perhaps buy a few items at Amazon.com, and exchange e-mail with friends and family. Social media or social networking probably seem best left to high school students. But you have seen its power by watching the demonstrations associated with the Iran election and the stream of user-generated images after the earthquakes in China, Haiti, and Chile. Real-time communication platforms like Twitter and Facebook had spread the word about what was happening within these nations, long before the mainstream media reported the story. The Chinese government, for example, first learned about the earthquake in the Sichuan province from its own citizens using social media.¹

These news stories may have led you to explore Facebook and Twitter, but the idea of opening your personal life—let alone your professional one—to Internet commentary seems perverse and an invitation to disaster. But there is no denying that social media—an umbrella term for the various activities that integrate technology, social interaction, and the construction of words, pictures, and audio—is becoming a force. At one point, Twitter was in the running to become Time Magazine’s “Person of the Year.”

Social media is part of Web 2.0, the buzzword that refers to the evolution of the Internet from a passive viewing model (Web-as-information source) to a more personal and interactive experience (the participatory Web). A news story that is delivered online becomes social media if there is a place for readers to comment; the interactive component is the key. Internet applications now facilitate information sharing, interoperability, user-content generation, and collaboration, thereby democratizing knowledge and enriching the user experience.

Companies are beginning to use social media as a marketing and customer support tool. As of the end of March 2010, 600 hospitals were actively using social media, including 280 YouTube channels, 382 Facebook pages, 470 Twitter accounts, and 82 blogs.² But is there any value for physicians in general and pathologists in particular? Let’s take a look at some of the more popular forms of social media and consider the possibilities for our profession.

Pathology 2.0 is a term coined by Keith Kaplan, MD, of the Mayo Clinic (Rochester, Minnesota) to describe the ability to share and interact with pathology images and content.³ It points to the increased use of blogs, wikis, YouTube videos, and other social-networking technologies.

Pathologists have been slow to embrace the tools of Pathology 2.0. Even second-year medical students, when offered the ability to actively participate in a lung pathology course using a blog and Twitter account, were very tentative.⁴ But such teaching experiments presage a time when most lectures will be Webcasts and the commentary will be driven by social media exchanges.

Forums and Listservs have been around a long time and the oldest and most active one, PATHO-L, recently surpassed 800 subscribers.⁵ There is a mix of useful information along with politics and nonpathology commentary. It relies on e-mail interchanges and lacks the dynamics and rich media experience of Web 2.0. There is healthy give-and-take, with no risk of anything “going viral.”

Excellent pathology blogs are available, such as Bruce Friedman’s Lab Soft News (http://labsoftnews.typepad.com/; accessed April 21, 2010), Keith Kaplan’s Digital Pathology Blog (http://www.tissuepathology.typepad.com/weblog; accessed April 21, 2010), and Mark Pool’s The Daily Sign-Out (http://pathlabmed.typepad.com/; accessed April 21, 2010). All are well established and provide useful pathology news and opinion, with the option to post comments and to be alerted to new posts via Twitter.

Pathologists typically have the largest collection of books in the hospital, aside from the library, but there is nothing that inherently connects those texts. That is the idea of a pathology wiki or online encyclopedia. Created

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by knowledgeable experts, it can cull the best from our books and journals. The trend to produce accessible repositories from such “crowd-sourced” knowledge is growing, although there are only a few pathology-focused wikis, such as the one featured on Digital Pathology.

Updates are fast but some sort of monitoring is needed to ensure that the information is accurate and evidence based. Google Wave is one technology that can be used to track and generate ideas and permit a more inclusive perspective of wikis and other collaborative projects.

Video-sharing sites, such as YouTube, provide something akin to television on the Web, with infinite channels. There are a small but growing number of pathology teaching videos, along with pathology company sales demos. The United States and Canadian Academy of Pathology (USCAP) recently launched USCAP-TV, capturing highlights from the annual meeting. YouTube’s value may seem to be limited to marketing and education, but consider that Google has developed software for analyzing the spectral pattern of uploaded video so that it can detect pirated copies of movies. The algorithm called Content ID can detect similarities, not just exact duplicates. Such algorithms could be used to detect commonality in photographs and whole slide images to help catalog pathology Web images and perhaps be used to diagnose unknown neoplasms.

Facebook is now the second leading Web site with nearly 400 million users (behind Google’s 800 million). The layout provides ample space for pictures, links, book lists, and blog posts. The density of information is almost limitless. Special applications exist to extend the social reach even further. Many businesses—including a few pathology businesses—have posted “fan pages” where one can post comments, report issues, and ask for help.

Some medical organizations are actively engaged, such as the American Society of Clinical Oncology (ASCO), where the landing page (Wall) has frequent announcements. Downloadable podcasts and YouTube videos are available and the notes sidebar has news, editorials, and other ASCO messages. Pathology organizations have nowhere near this level of content.

For individual pathologists, Facebook is where Communities of Practice could be set up to share expertise and provide a forum for sharing difficult or interesting cases. PathXchange does this, mimicking some of the features of Facebook, but the focus is on digital slides, not the pathology community in general. Archives of Pathology & Laboratory Medicine has a Facebook fan page where, in the future, we will be able to meet authors and thought leaders virtually. For personal use, Facebook is a great place to stay connected with friends and it’s also a great way to get fired, have your insurance benefits revoked, or suffer public humiliation. For physicians, separating personal pages—sometimes with embarrassing content—from professional medicine-related content can be tricky and worrisome.

Twitter, or similar microblogging tools, seems too simple to be of any use to pathology. What can we contribute in 140 characters or less? By taking out the status update function of MySpace and Facebook and blending it with the idea of the chat room, the creators have developed one of the most versatile social-networking sites in all of Web 2.0. Twitter is most useful to distribute small bits of information but it’s the connections that make it all worthwhile. Its power is the viral cascade effect of “retweeting,” where a single message can spread to thousands or millions of users. The Centers for Disease Control has used Twitter to issue pandemic alerts. The US Food and Drug Administration’s (FDA’s) Center for Devices and Radiological Health is adding Twitter to its communication and outreach program.

Hospitals can use microblogging for tissue recruitment and organ donation (blood drives, etc), notification of health fairs, bioterrorism alerts, fundraising, broadcasting results of satisfaction surveys and College of American Pathologists (CAP) inspection results, and customer service alerts. It can be used for patient satisfaction surveys with immediate follow-up for problem resolution. Other possibilities are staffing requests for the laboratory, job recruitment, notification of policy and procedure updates, and to report adverse events to the FDA.

For patients, these small bits of information (properly encoded for privacy) can be used to direct them to authoritative health care content online, alert them when lab results are available, send Pap test reminders, and promote health and wellness. It seems like an ideal tool to track glucose results and capture data from biomedical devices. Patients can also use Twitter to find clinical trials.

For pathologist-bloggers, Twitter is used to draw people back to their Web sites for more in-depth discussion or to view the latest post. It can also be used for opinion sharing, case education, diagnostic brainstorming, peer-to-peer reviews of articles of interest, and mentoring new members of the staff. In the lab, it could be used to track antibiotic resistance. With privacy safeguards in place, critical lab values can be broadcast to clinicians (requiring a response that the message was received).

For national pathology organizations like the CAP, USCAP, and ASCP (American Society for Clinical Pathology), live tweeting in conferences, using a backchannel (#hashtags), can alert people to course schedule changes, last-minute registration and course availability, and can be used for electronic voting. Advocacy is another obvious use.

With the explosion of health-related content, there is a real need to properly organize and vet the content. Known sites, such as the Mayo Clinic and Cleveland Clinic (Cleveland, Ohio), which have embraced social media in all its forms, are known entities, but there are a lot of opinions out there without the peer-review process we are used to. Experts predict that the content of the Web will soon double every 72 hours, and a simple Google search will be too broad to be useful. So-called content curators will be needed who can make sense of all the data others are creating. People in this new job category will help us establish best practices through evidence-based information.

Facebook and Twitter are making a major impact on purchase decisions. Fans and followers of a brand are exchanging views and making buying decisions based on “word-of-keyboard” recommendations. Pathology could use these tools to aggregate all Web-based continuing medical education (CME) offerings and then attach a rating system (similar to Amazon.com). For example, self-
Many organizations are creating SAMs. The quality varies and a central Web site that lists them and allows comments and ratings would be welcome. Many pathology images on the Web are of poor quality and those should be rated as well. Social media brings transparency that we may not be comfortable with. It would be interesting to see the Twitter posts if the American Board of Pathology or residency/fellowship programs had a social media presence. It is exactly this type of dialogue and feedback that can build the momentum needed to effect positive change. Transparency allows problems to be addressed early but we might also be able to glimpse how the “sausage is made,” and sometimes that is not a pretty sight (as we’ve seen with the recent debate on health care). The truth is that we will all have to get used to living in an age of show all and tell all. Even if you are one of the few people who actually know how to properly configure the privacy settings in Facebook, it may not matter. A new Web site, called Unvarnished, allows you to rate people. You can rant anonymously about your employer, spouse, workmate, physician, etc. For pathologists, reviews could be posted of pathology consultants who handled cases poorly. And, unlike LinkedIn, you cannot prescreen or remove the comments. Managing your online reputation—both for companies and individuals, is going to be impossible.

Those cautionary words aside, the sociologic petri dish of Twitter, YouTube, Facebook, and other forms of social media remain important niche opportunities for pathologists, as we walk the fine line between caution and fear. Like all professions, we will be completely and permanently altered by our Internet connections. As we struggle to become a visible voice on the health care team, making pathology more “social” is not just a thing to do but also a way to be. Social media’s promise of communication and collaboration will prove to be an important tool in our quest to transform, elevate, and humanize the specialty. Transparency brings risks but it also brings opportunities. These tools offer us a chance to put a human face on pathology—our own face. By embracing them—even with a dose of skepticism—we put another nail in the notion that pathologists are detached—or even antisocial. Social media will help us become more imaginative, determined, innovative, and remarkable—worthy traits for a new generation of transformed pathologists.

References


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