

Online conferencing saves participants time, travel



**Tech
Talk**

By H. Jay Wisnicki, MD

Myriad features allow tailored configurations, delayed access

Communicating with a group of employees or colleagues used to require travel to a site, a conference room, and thousands of dollars in equipment rental charges for overhead projectors and sound systems. As com-

puters entered the fold, presentation software such as Microsoft's PowerPoint made the overhead projector obsolete, but travel was still often required for a true conference or presentation.

Not anymore.

Today, presentations and meetings can be done through the Internet, once again allowing people to get together without ever leaving their offices or hometowns. Service providers are offering to run conferences and presentations from their Web sites, allowing "participants" to take part in the conference or presentation from wherever they might be stationed.

And these programs can be archived to allow those unable to "attend" to receive the presentation, listen to any dialogue, and e-mail comments or questions as their schedule permits.

In short, communication is growing once again.

With online conferencing, up to 32 users can call the service provider themselves via a toll-free number and provide a password. Some services will call participants to have them join the conference when they answer their phone.

Participants are also able to log into the online presentation—as many as 40 different file types, including PowerPoint, Excel, Word, and a variety of graphic files—are supported and can be viewed in real time slide-show formats.

An application-sharing feature allows users to run virtually any application for demonstration and training purposes. The presenter can share control of the software for a full interactive experience. In fact, presenters can share almost anything on their PC system, including multiple applications. This is handy when demonstrations require more than one application at one time.

When using graphic-intense presentations, remember, just as with all Web sites, the faster the connection rate, the

A few service providers include:

Brainshark.com

DocumentForum.com

Hostedconference.com

3cube.com

WebEx.com

better the presentation quality. PowerPoint presentations, for instance, work best with a high bandwidth. Participants with dial-up modems in the 56K range will see a choppy presentation than users who connect via cable or other high-bandwidth connection.

Conference leaders have the option of running the conference as a presentation, where they simply lecture with the slide show acting as a visual aid, or they can run the presentation interactively, with participants actively taking part in the process. While most services limit the "participants" to 32 people, the "listen only" feature allows almost an unlimited number of participants to take part in the conference.

Conference leaders have the option of allowing select participants to control any application they are running. For instance, a conference leader running a PowerPoint presentation can allow participants to amend the presentation, change data values as needed, etc. A leader running an Excel presentation as part of that PowerPoint presentation can allow someone to change data, say sales projections, and those changes will be incorporated into any linked document in that presentation.

Conference leaders also can opt to mute participants selectively or place them on hold as well. Muted participants cannot talk during the presentation, while those placed on hold cannot hear what is being presented at that time. This allows for some "aside" discussions as needed.

However, participants do have use of an instant messaging feature, allowing them to send messages to other participants without other users seeing the text. Users can send these messages to one, several, or all participants in the group. This "talking behind the teacher's back" allows for some additional idea exchanges, albeit off the record.

Participants may share any presentation without uploading the file to a server. This might not seem like a major issue, but this allows for additional peace of mind—file security is more likely to be compromised when uploaded to a server.

Security can be a concern when deal-

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ing with any Internet-based file exchange. Most service providers have designed their software to be fully compatible with existing firewalls, so security concerns can be alleviated. In addition, these providers will offer unlisted

meetings, similar to unlisted phone numbers, password protection, and data encryption when needed.

An additional benefit of using online conferencing is the ability to archive presentations for later use. The entire presentation can be saved for later review, as well as to provide it to those unable to attend the initial session. This also saves on the tedium of taking notes throughout the session.

Service providers are just beginning

to scratch the surface of the technology. Original service was limited to "chat room"-style conversations and little, if any, graphical content. With voice and graphic integration, active participation, and the ability to change data on the fly, the service is growing rapidly, and providers are looking for ways to change today's custom presentations into tomorrow's standard offerings.

Online conferencing allows users the convenience of sharing information and

presentations with users across the world without travel expenses.

The electronic capabilities today provide the busiest of individuals the opportunity to participate more while spending less time and money—and suffering less from jet lag in the process. ♠

Editor's Note: In the Oct. 1 Tech Talk, online conferencing for continuing medical education events will be covered.

CTA Exam much shorter

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small aneurysms, and the most current techniques boast detection of aneurysms as small in diameter as 1.7 mm.¹ It also has an advantage of superior imaging of the neck of the aneurysm. CTA has also documented aneurysms that were originally missed by digital subtraction angiography (DSA).²⁻⁴ CTA found 96.8% of symptomatic aneurysms and 78.1% of incidental aneurysms.⁵ Aneurysms can be missed if they are located near the skull base or outside the imaging volume.

**CTA exposes
the patient to
radiation,
unlike MRA.**

Surgical anatomy is better delineated by CTA than DSA.⁶ A study comparing CTA with both DSA and MRA found CTA to be superior to both in characterizing branching patterns at the aneurysm neck, neck geometry, presence of branch incorporation, and mural calcification.¹

CTA was better than DSA at characterizing mural thrombi in the aneurysm as well. Furthermore, the exact size of the aneurysm and its relationship to the surrounding bony anatomy can be defined with CTA. Vasospasm, if present, can also be determined.⁴ The three-dimensional images can be rotated to the exact plane that the surgeon will use to access the site of the aneurysm.

With the advent of the data presented in the North American Symptomatic Carotid Endarterectomy Trial, it is imperative to quantify accurately the level of stenosis of a symptomatic internal carotid artery (ICA). DSA is the gold standard for measuring proximal ICA stenosis and CTA has been used as a noninvasive test similarly to ultra-

sound (US) to screen patients for possible symptomatic ICA stenosis. A comparison of MRA versus CTA showed that MRA tended to overestimate stenosis while CTA underestimated stenosis.⁷

CTA has its drawbacks. CTA exposes the patient to radiation, unlike MRA, but less than DSA. Patients are also exposed to an iodinated contrast agent. Arterial wall calcifications, very common in atherosclerotic plaques, are a limiting factor in reconstructions of CTA. Collateral flow cannot be assessed with CTA, which is of great clinical importance. It is more difficult to image the whole ICA in one sitting with CTA as opposed to MRA.

There are limited data concerning the efficacy of CTA in imaging of intracranial stenoses, carotid cavernous fistulae, use with thrombolytics, and arterial dissection. As more reports and series enter the literature, knowledge concerning the accuracy of this imaging modality will lend itself to better therapeutic decision making. ♠

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