浅谈网络视频会议系统在新型冠状病毒肺炎疫情期间麻醉质控工作中的应用

李正迁1, 周阳1, 杜海明1, 曾鸣1, 王军1, 邓曼莉2, 乔辉1, 谭刚1, 王志成3, 赵晶4, 左明章2, 王天龙1, 李天柱1, 米卫东1, 黄宇光1, 郭向阳1

（1北京大学第三医院麻醉科，北京市临床麻醉质量控制和改进中心；2解放军总医院第一医学中心麻醉科；3首都医科大学附属北京世纪坛医院麻醉科；4中国医学科学院北京协和医院麻醉科；5首都医科大学附属北京同仁医院麻醉科；6中日友好医院麻醉科；7北京大学麻醉科；8首都医科大学宣武医院麻醉科，北京 100191）

[摘要] 随着互联网技术的不断发展，网络视频会议系统在医疗领域中的应用越来越广泛。2020年2月是新型冠状病毒肺炎（简称新冠肺炎）疫情工作的关键时期，北京市临床麻醉质量控制和改进中心（简称质控中心）及时制定了相应的麻醉专业规范，并联合北京医学会麻醉学分会、北京医师协会麻醉学医师分会、中华医学会麻醉学分会质量管理体系及京津冀麻醉协同发展新平台，通过专业视频会议系统，成功组织了新冠肺炎疫情防控工作专题视频会议及为期5天的培训周活动，取得良好效果。本文以北京质控中心视频会议及质控系统培训周为例，介绍视频会议系统的特点，分析在重大疫情期间视频会议在临床麻醉质量控制和持续改进中的优势和应用前景。

[关键词] 质量控制；视频会议系统；新型冠状肺炎

DOI: 10.3969/j.issn.2096－2681.2020.02.001

Role of video conference system in clinical anesthesia quality control and improvement during the period of prevention and control of COVID-19

LI Zhengqian1, ZHOU Yang1, DU Haiming1, ZENG Hong1, WANG Jun1, DENG Manli2, QIAO Hui3, TAN Gang4, WANG Guyan5, ZHAO Jing6, ZUO Mingzhang7, WANG Tianlong8, LI Tianzuo3, MI Weidong2, HUANG Yuguang4, GUO Xiangyang1

1Department of Anesthesiology, Peking University Third Hospital, Beijing Center of Quality Control and Improvement on Clinical Anesthesia; 2Department of Anesthesiology, Chinese PLA General Hospital; 3Department of Anesthesiology, Beijing Shijitan Hospital, Capital Medical University (CMU); 4Department of Anesthesiology, Peking Union Medical College Hospital; 5Department of Anesthesiology, Beijing Tongren Hospital, CMU; 6Department of Anesthesiology, China-Japan Friendship Hospital; 7Department of Anesthesiology, Beijing Hospital; 8Department of Anesthesiology, Xuanwu Hospital, CMU, Beijing 100191, China

Corresponding author: GUO Xiangyang, E-mail: puthmz@hsc.pku.edu.cn

[Abstract] With the continuous improvement of Internet technology, the network video conference system has been widely adopted in the medical field. In February 2020, the critical period of prevention and control of pneumonia caused by the novel coronavirus (COVID-19), Beijing Center of Quality Control and Improvement on Clinical Anesthesia timely formulated the anesthesia professional norms, successfully organized and held remote conferences and the week-long training program on the prevention and control of COVID-19, jointly with Anesthesiology Branch of Beijing Medical Association, Beijing Association of Anesthesiologists, the Quality Management Group in Chinese Association of Anesthesiology, and the Integrated Development of Beijing-Tianjin-Hebei Region Anesthesia Standing Organization. The training program has achieved good results and received participants’ warm feedback and positive responses. In this article, we take video conferences held by Beijing Center of Quality Control and Improvement on Clinical Anesthesia as an example, introduce the characteristics of...
video conference system, and analyze the advantages and application prospects of video conferences in clinical anesthesia quality control and continuous improvement during the epidemic of COVID-19.

[Key words] quality control; video conference system; COVID-19

Video conference systems are through network communication technologies to achieve the virtual video conference system, is currently supported by people far distance communication real-time information exchange and share, operation of work and other applications of the system [1]. With the development of network technology, "Internet +" ideas深入人心, video conference systems gradually elevated, in the medical field, but also in more and more fields, and with the development of information technology, the former in the hospital are used to achieve information sharing, but also in the government, education, financial, cultural, tourism, etc., more and more widely used in various fields.

2 Key Focus on the New Type of Epidemic, the New Type of Innovation

In the new type of epidemic, the video conference system is becoming more and more important, and it is being used in various fields. It is an effective way to improve the efficiency of work and reduce the cost of communication. The video conference system is also being used in the medical field to improve the efficiency of medical care and reduce the cost of medical care.

3 Key Focus on the Development of Video Conference Systems

The development of video conference systems is closely related to the development of network technology, which is constantly advancing and changing. The development of video conference systems is also closely related to the development of other technologies, such as communication technology, computer technology, and audio and video technology. The development of video conference systems is also closely related to the development of social and economic development, which is constantly changing and developing.

4 Key Focus on the Future Development of Video Conference Systems

With the development of network technology and other technologies, the video conference system will continue to develop and improve. The video conference system will become more and more powerful, and will be used in more and more fields. The video conference system will also become more and more convenient, and will be used more and more widely. The video conference system will become an important part of people's lives, and will continue to play an important role in various fields.
视频会议不受场地大小的限制，此次质控中心培训先后共有来自京津冀及国内其他地区的6000多名麻醉医生在线进行了学习和培训，会议组织者无需为适宜的场地费神。考虑到北京质控中心共有174名质控专家，遍布全市16个行政区，打破传统的现场培训模式，采用视频会议系统定期进行质控专家培训，有望成为北京市质控中心后期的常态工作。

4 保障保密性，兼顾仪式感

由于质控工作可能涉及患者隐私、医疗诉讼、医内经营管理等需要保密的信息，因此，质控会议要求具备一定的保密性。通过视频会议的加密系统，后台可实现与会人员的身份验证和密码登录，从而保障会议内容的私密性。

此外，作为北京市卫生健康委员会医政管理职能的延伸，质控中心的权威性要求质控会议具备其严肃性。尽管视频会议系统无法实现现场会议的仪式感，但该系统的高清视频画面、传输质量和图像声音同步性，实现了与会者身临其境的可视化沟通方式，为传达上级文件、决策议题、组织培训等关键环节提供强力支持。

5 创新学术交流模式，启发质控平台建设

北京市麻醉质控中心成立15年以来，秉承做高质量临床麻醉质量“首善之区”的指导思想，担任着北京市临床麻醉安全和均质化发展的重要使命。因此，加强动态调研，及时发现问题并进行整改，是质控中心常抓不懈的工作。北京质控中心目前共有质控督导专家214名，负责定期对全市所有正规麻醉科的二甲以上医院进行督导和调研。此次是质控中心自成立以来，首次创新性地采用视频会议系统，取得良好效果，为后期督导专家通过视频会议系统进行调研奠定了基础。通过视频会议系统，不定期进行质控督导，不仅能节约督导专家大量时间成本，又能产生类似飞行检查的效果，掌握真实的质控现状，及时发现问题并进行整改。

总之，视频会议系统作为一种新型的沟通工具，其身临其境的可视化远程交流方式，改变了异地出差等传统会议模式。基于视频会议系统的质控工作模式，在保障会议质量的同时，节约时间、资源和费用，必将推动质控工作高效和绿色地发展，尤其为类似新冠肺炎等特殊时期质控工作的有序推进，提供更加坚实的技术支撑，是时代的选择。

参考文献：

（本文编辑：谢彦蔚）