

Surgical education during pandemic times: How the virtual world can help us in real life? The Hernia U experience



Formación quirúrgica en tiempos de pandemia: ¿ cómo puede ayudarnos el mundo virtual en la vida real? La experiencia de Hernia U

Dear Editor,

The World Health Organization declared the Corona Virus Disease (COVID-19) a pandemic on March 11th. As this unprecedented situation deteriorated all universities have stopped all types of lectures and changed to online methods.^{1,2} The first activities suspended were medical students' clinical clerkships and elective opportunities.^{3,4} Surgical residents faced a great challenge during the pandemic. Elective surgeries for benign diseases were postponed and the urgent or emergency surgeries were performed by more experienced surgeons. This reduced the number of learning opportunities for surgical residents.¹

During the global crisis, social media platforms (Twitter, Facebook, WhatsApp) and also applications for videoconferencing (Google Hangouts, Skype, Zoom, WebEx) have played a prominent role.¹ Surgery Departments were able to implement activities such as journal clubs, case discussions and lectures to provide adequate surgical education to medical students, residents and attendings. Surgical societies tried to mitigate the scientific damage imposed by the pandemic. Many surgical meetings were postponed or cancelled this year due to the pandemic. Others had online editions at a low cost or free of charges. The same phenomenon happened with hands-on courses, lectures and social meetings.

Hernia U steps up

The Hernia U team realized the need to strengthen surgical education online during this difficult time. Hernia U (www.herniau.com) was created in 2016 by hernia specialists with the objective to expand the abdominal wall surgery (AWS) educational landscape and make it available for surgeons who wanted to revisit their hernia education. It is an online platform where surgeons can register with no cost and

subscribe for different activities: *Hernia A to Z Fundamentals, Advanced, Live surgeries, and Hernia U library* which is a depository for high quality lectures, cases and the Hernia U podcast. Some courses (*Hernia A to Z Fundamentals and Advanced*) are available in other languages: Chinese, Spanish, French or Arabic. Currently, more than 15,000 professionals from 157 countries have already participated in one of the courses available in the platform since its beginning.

A new modality of live lectures was created after March 11th. Not just exclusively our team perceived the need to strengthen surgical education online, but also surgeons around the globe. In 2019, 1709 new surgeons registered in the platform from March 11th to the end of September. In 2020, this number increased more than 3 times: 5523 new surgeons registered in the same period. In the last 6 months, Hernia U has broadcasted 28 live events (21 lectures and 7 surgeries) against 7 live surgeries in the same period last year. (Table 1) There were not just hernia-related topics. Specialists also discussed what surgeons should know during the pandemic (lecture in English and Spanish) and the importance of social media. Furthermore, Hernia U has joined forces with the Americas Hernia Society (AHS), the European Hernia Society (EHS) and the International Hernia Collaboration (IHC) from Facebook to proportionate scientific activities. Hernia U didn't just offer more activities, but they offered activities that surgeons were eager to participate in Table 1.

Despite the pandemic, Hernia U team managed to have the same number of live surgeries as in the same period of 2019. To our surprise, the number of surgeons who attended these live cases was higher (1202 versus 803) and the logins per surgery was significantly higher: 195.6 versus 114.7 logins/surgery ($p = 0.021$). It is important to note the 1202 was the number of different surgeons who watched the live surgeries, but to calculate the audience (logins/surgery), the same surgeon could be counted more times, depending on how many events he was present.

Table 1 – Hernia U attendants from March 11th to October in 2019 and 2020.

Hernia U	2019	2020	p-Value
New Surgeons registered (March 11-oct.)	1709	5523	
Live Surgeries (March 11-oct.)	7	7	
Live Surgeries surgeon attendance (March 11-oct.) ^a	803	1202	
Logins/surgery (March 11-oct.)	114.7	195.6	0.021
For statistical analysis, IBM SPSS Statistics for Windows, version 26 (IBM Corp., Armonk, N.Y., USA).			
^a Total number of different surgeons that attended the events.			

We are living in a time where social distancing can mitigate the spread of the disease. This cannot stop us from sharing knowledge and experiences which will improve healthcare worldwide. We have the tools that allow us to make it available to everyone and Hernia U is part of this arsenal.

Funding

There was no funding for this research project.

Conflicts of interest

DL Lima and RNCL Lima have no conflict of interests.

Drs DL Lima, RNCL Lima, SMConde reports consulting fees from BD Bard, Medtronic, Ethicon, Stryker, Storz, Olympus, Baxter, Dipro, BBraun, Gore, outside the submitted work.

EPDavila discloses consulting fees from Bard Davol, outside the submitted work.

Dr. Malcher discloses consulting fees from BD & Medtronic, outside the submitted work.

Dr. Cavazzola discloses consulting fees from Strattnet and Intuitive, outside the submitted work.

Acknowledgments

We'd like to thank Jennifer Petrie for helping with the manuscript.

REFERENCES

1. Dedeilia A, Sotiropoulos MG, Hanrahan JG, Janga D, Dedeilias P, Sideris M. Medical and surgical education challenges and innovations in the COVID-19 era: a systematic review. *In Vivo*. 2020;34 Suppl.:1603- .
2. Mian A, Khan S. Medical education during pandemics: a UK perspective. *BMC Med*. 2020;18:100.

3. Gallo G, Trompetto M. The effects of COVID-19 on academic activities and surgical education in Italy. *J Invest Surg*. 2020;33:687- .
4. Calhoun KE, Yale LA, Whipple ME, Allen SM, Wood DE, Tatum RP. The impact of COVID-19 on medical student surgical education: Implementing extreme pandemic response measures in a widely distributed surgical clerkship experience. *Am J Surg*. 2020;220:44- .

Flavio Malcher^a, Diego Laurentino Lima^{b*},
Leandro Totti Cavazzola^c, Raquel Nogueira CL Lima^d,
Eduardo Parra Davila^e, Salvador Morales-Conde^f

^aDirector Abdominal Wall Program, Department of Surgery, Montefiore Medical Center and Assistant Professor, Albert Einstein College of Medicine, Bronx, NY, USA

^bDepartment of Surgery, Montefiore Medical Center, Bronx, NY, USA

^cDepartment of Surgery, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil

^dPernambuco Health College, Recife, PE, Brazil

^eDirector of Hernia and Abdominal Wall Reconstruction, Good Samaritan Medical Center-TENET Health, West Palm Beach, FL, USA

^fChief of Innovation in Minimally Invasive Surgery of the University Hospital Virgen del Rocío and Head of the General and Digestive Surgery Unit of Hospital Quironsalud Sagrado Corazon, Sevilla, Spain

*Corresponding author.

E-mail address: dilaurentino@gmail.com (D.L. Lima).

<https://doi.org/10.1016/j.ciresp.2020.12.007>
0009-739X/

© 2020 AEC. Published by Elsevier España, S.L.U. All rights reserved.

Use of endoluminal vacuum-assisted therapy for treatment of gastric fistula after Appleby procedure



Uso de la terapia de vacío endoluminal para el tratamiento de la fístula gástrica tras el procedimiento de Appleby

The use of vacuum-assisted therapies for anastomotic leakage after rectal resection is a well-known minimally invasive technique. It showed excellent results in the literature, with successful curative rates over 90%.¹

A novel use of endoluminal vacuum-assisted therapies for treatment of upper gastrointestinal (GI) tract defects has recently been proposed. Several studies have been published in the literature, reporting promising results on the use of