

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. **Results:** Of 30 patients, one patient was found to have multifocal biliary strictures requiring two biliary stents on endoscopic retrograde cholangiopancreatography five months post procedure (n = 1, 3.3%). Two patients demonstrated grade 3/4 bilirubin toxicity (n = 2, 6.7%). The average treatment dosage was 135 Gray (range, 95–341 Gy). Compared to the biliary complication rate described in the literature for HCC with 2.1% for biliary findings on imaging and 6.8% for grade 3/4 bilirubin toxicity², our study showed comparable rates of 3.3% and 6.7%, respectively.

Conclusions: Yttrium-90 radioembolization of segment IV HCC demonstrated no significant difference in biliary complication rates compared to nonsegment specific biliary complication rates reported in the literature.

Abstract No. 526

Role of interventional radiology in a pandemic <u>T. Grewal¹</u>, I. Provancha¹, M. Swikehardt¹, S. Patel¹, <u>S. Fahrtash²</u>, P. Hammill¹, J. Walsh¹; ¹SUNY Downstate/Kings County Hospital; ²SUNY Downstate

Purpose: (1) Recognize the benefit of leveraging interventional radiologists as surge support during periods of mass critical illness, rapid assembly of a dedicated vascular access team. (2) Multifunctionality of catheter usage during hospital shortage.

Materials and Methods: During peak times of the novel COVID-19 virus, Kings County Hospital in Brooklyn, New York was, among others, a highly impacted institution in one of the most case-prevalent counties in the state. The IR and surgery residents of Kings County Hospital developed a joint 24/7 emergency line team during the month of April at the height of COVID-19 infections. Being an urban hospital with limited ancillary staff, an over-capacity census, and newly formed ICU's in outpatient facilities, the development of a line team was a necessary evolution to play a pivotal role in aiding our colleagues to treat the critically ill. IR and surgery residents were paired and placed on 12hr shifts, holding a dedicated cell phone. The sole responsibility was to place lines that were necessary on the floor including midlines, central lines, and hemodialysis catheters (HD).

Results: Several supplies had run short during the peak of COVID-19 including most variations of central venous access catheters. Midlines were the most consulted procedure due to difficult access and long-term stay. During times of resource depletion, the application of various catheters was expanded with PICC lines cut short to be used for varying needs of central access and micropuncture sheaths sutured in place to be used as midlines. Tunneled HD catheters were used in place of temporary HD catheters. A total of 154 lines were placed at the bedside in critically ill COVID positive patients by the line team. The lines that were placed included 68 midlines (44%), 31 central lines (20%), and 55 HD catheters (35%).

Conclusions: IR has the potential to play a vital role as an emergency team during times of uncertainty, such as a pandemic. Over the course of a month, 154 lines were placed which accelerated patient care and treatment. Our experience supports hospitals in the epicenter of a pandemic should consider a dedicated line team to provide support and aid in cross-departmental patient care delivery.

Abstract No. 527

High incidence of large-bore temporary hemodialysis catheter thrombosis in patient with COVID-19–related kidney injury

<u>A. Kubiak¹, N. Chauhan¹, H. Haque¹, A. Shrinet¹, S. Shanmugasundaram², A. Kumar¹, P. Shukla¹; ¹Rutgers New Jersey Medical School; ²New Jersey Medical School</u>

Purpose: To evaluate the incidence of large-bore hemodialysis catheter thrombosis in the setting of COVID-19.

Materials and Methods: A retrospective review was performed of all patients who underwent placement of a temporary hemodialysis catheter after developing kidney injury after COVID 19 infection at our institution. Data collected included demographic information, procedure related information, and incidence of replacement due to lumen thrombosis. Groups were compared using students t-test for continuous variables and Fisher's exact test for nominal variables.

Results: 64 patients (43M, mean age 63.2 ± 13.3) underwent placement of temporary hemodialysis catheter placement for kidney injury related to COVID 19 infection. 31 (48.4%) of catheters were placed via an internal jugular vein (IJV) access and 33 (52.6%) of catheters were placed via a common femoral vein (CFV) access. Overall, 15 (23.4%) catheters required replacement due to lumen thrombosis despite heplock. There were no difference in age or sex in patients who required replacement to those who did not (*P* .0.05) [*sic*]. Of the replacements, 5/31 (16%) were placed via an IJV access and 10/33 (30.3%) were placed via a CVF access, although this difference was not statistically significant (*P* = 0.18). The average time to malfunction/replacement was 7.8 ± 4.8 days for catheters placed via an IJ access versus 3.4 ± 3.3 days for catheters placed via a CFV access (*P* = 0.055), trending toward significance.

Conclusions: A high incidence of temporary dialysis catheter lumen thrombosis was present in patients with COVID-19 infection. This may be due to COVID related thrombosis versus decreased level of catheter care. Catheters placed via a femoral vein access had more frequent malfunction and with shorter indwelling time, although not significant, which may be due to small sample size.

Abstract No. 528

Modeling socioeconomic and demographic variables affecting inferior vena cava filter placement and retrieval: a single-institution retrospective review at a safety net hospital from 2012 to 2019

<u>K. Curley</u>¹, B. Brown², K. White³, M. Xiong³, M. Kovacs⁴, A. Shah²; ¹Midwestern University– AZCOM; ²Valleywise Health Medical Center; ³University of Arizona College of Medicine–Phoenix; ⁴FirstEval

Purpose: This study was conducted to investigate the factors affecting IVC filter retrieval rates at a county hospital