



The Influence Of A Kybele Teaching Program On The Use Of Regional Anesthesia For Labor And Cesarean Delivery, During Covid-19 Pandemic, In Tuzla, Bosnia And Herzegovina

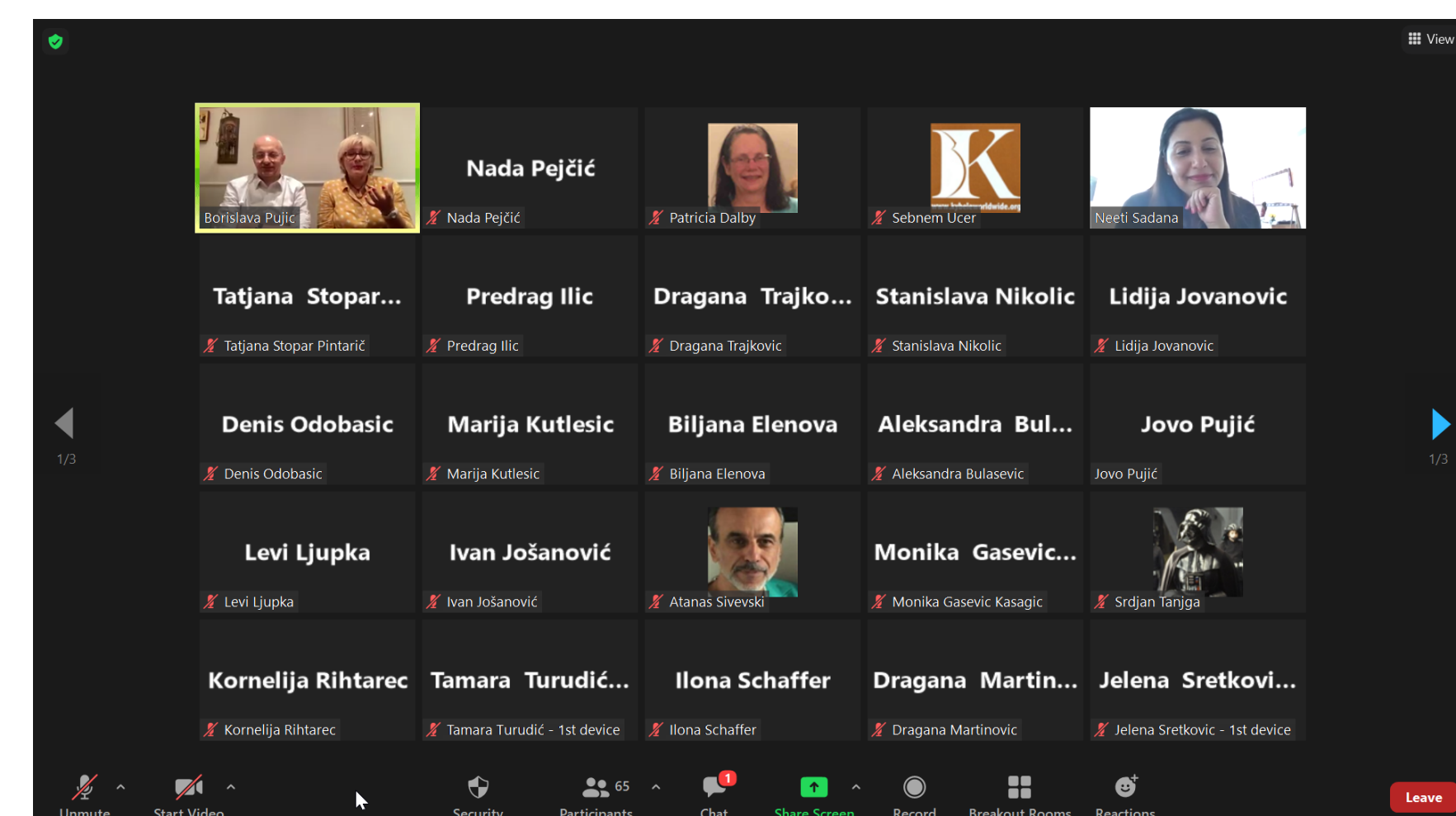
Ivan Velickovic, M.D., FASA¹, Nada Pejdic, M.D.², Erna Buro, M.D., Prim.³, Senida Keser, M.D., Prim.³, Igor Hudic, M.D., Ph.D.³, Jasmina Smajic, M.D., Ph.D.³.¹. Department of Anesthesiology, SUNY Downstate Health Science University, Brooklyn, NY, USA, 2. Leskovac General Hospital, Leskovac, Serbia, 3. Department of Anesthesiology, University Clinical Center Tuzla, Tuzla, Bosnia and Herzegovina.

Introduction

University Clinical Center Tuzla (UCCT) is the second largest Clinical Center in Bosnia, with approximately 3200 deliveries per year. Prior to Kybele visit, regional anesthesia (RA) and analgesia techniques were not used at Labor and Delivery unit. Members of the Department of Anesthesia at UCCT, requested a multi-year Kybele program in 2016 to help train physicians in the use of RA techniques for labor and Cesarean Delivery (CD). This study updates the efforts of Kybele and UCCT physicians to increase obstetric RA use during 2021.

Method

During 2021, two planned visits by a Kybele team were canceled. Obstetric anesthesia team in Tuzla continued to provide all medical and critical care of COVID positive pregnant patients in addition to their regular work at Department of Obstetrics and Gynecology. A phone consultations with a local team were done several times each month. The data were retrospectively collected on the use of RA for CD and on the use of RA for labor for the period of January 1st, 2021 to December 31st, 2021. Chi-Square test was used for comparison with 2020 data. Data was also collected on number of COVID positive patients with type of delivery and anesthesia technique used.



Department of Anesthesia at the University Clinical Center Tuzla (UCCT)

Results

The monthly and annual use of RA for labor and CD is shown in the Figure 1. Comparing 2021 with 2020 there was an increase in percentage of patient that received RA for CD (75.6% vs. 51.6%, $p < 0.00007$) and decrease in RA for labor (13.1% vs. 15.4%, $p < 0.002$). Out of 18 COVID positive patients, 14 had CD, all under RA and 4 delivered vaginally with spinal anesthesia (Figure 1).

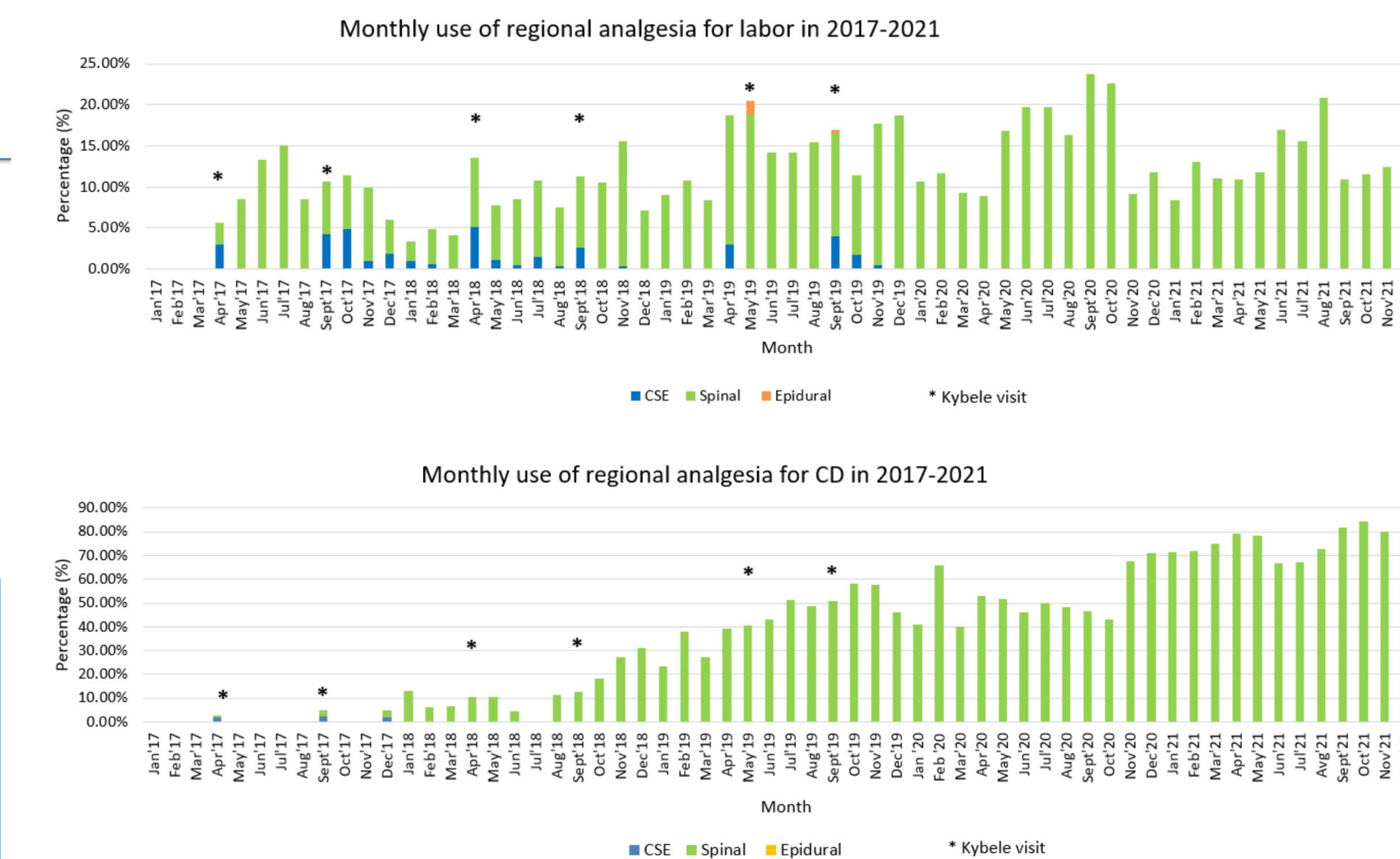
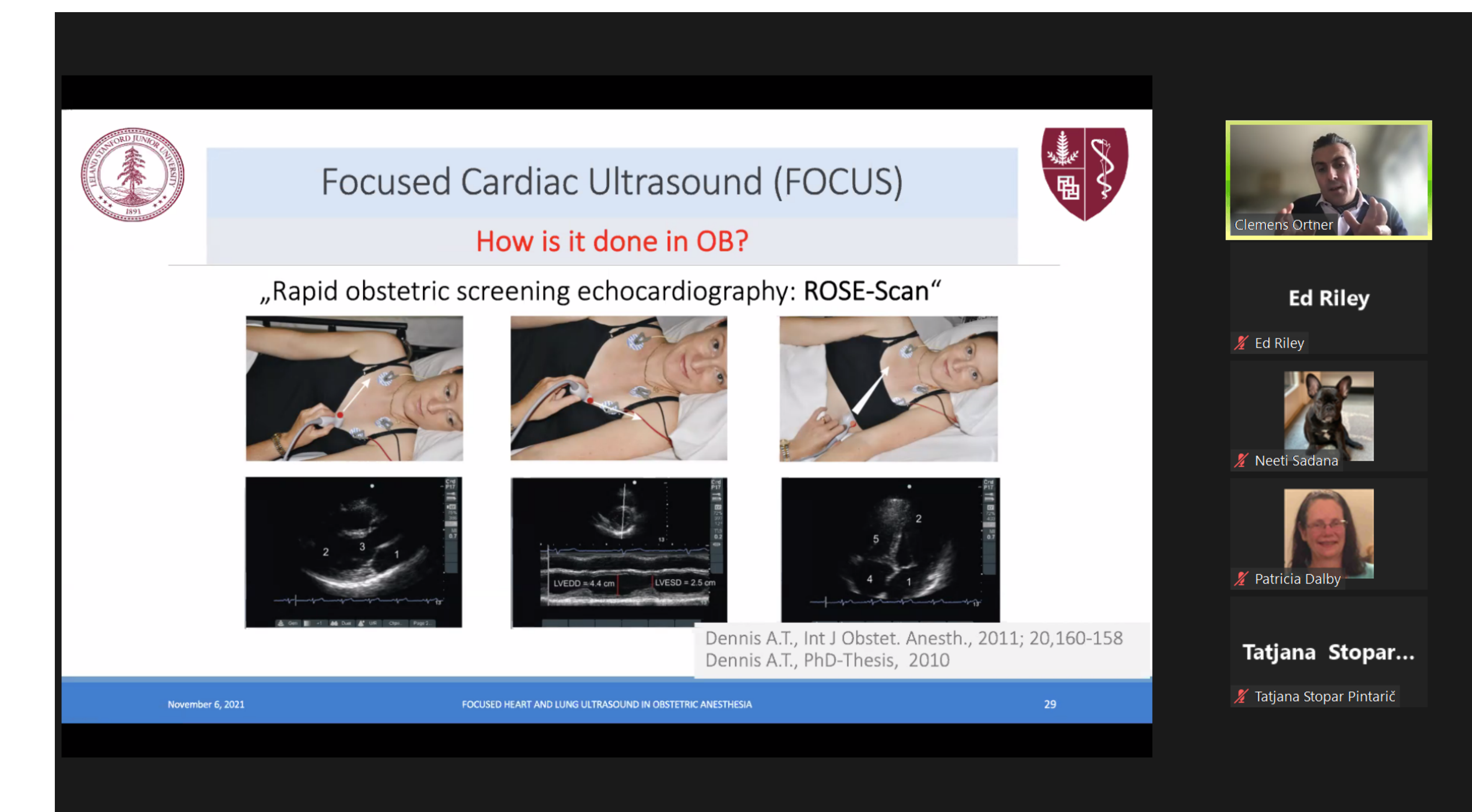


Figure 1. Monthly use of Regional Analgesia for CD and Labor in 2017-2021



Discussion

This data show increase in usage of RA for CD during COVID-19 pandemic. During the 2021 the percentage of patients that got labor analgesia went down (Figure 1.) and percentage of patients that had RA for CS went up. At the same time OB anesthesiologists took care of COVID positive patients in local ICU. Local team communicated with us that RA for CD was strongly encouraged in COVID positive patients in order to decrease the risk of transmission to anesthesia and OR team. Without our presence local team was reluctant to perform CSE and labor epidurals.



Kybele team working with Bosnian anesthesiologist

Conclusion

Regional anesthesia usage for CD at UCCT improved significantly during 2021. Staff at UCCT performed only spinal anesthesia so further visits are necessary to continue training in CSE and epidural anesthesia. Usage of RA for labor during the COVID epidemic decreased and will hopefully recover with decreased number of COVID positive patients.