The Influence of International Teaching Visit on the Use of Regional Anesthesia in General Hospital Leskovac, Serbia

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Introduction: In Serbia, the use of regional anesthesia (RA) and analgesia techniques in orthopedics and general surgery cases have been low, despite sporadic efforts to increase the use. Members of the Department of Anesthesia at General Hospital Leskovac, Serbia (LGH), asked for help in order train physicians in the use of RA techniques for orthopedic and general surgery cases. LGH is large general hospital in the south of Serbia, and major referral center for 250,000 people. In order for LGH to become recognized as a leading facility in regional anesthesia, the use of RA techniques must increase. A 4 day teaching visit by fellowship trained regional anesthesiologist from the USA was arranged. An ultrasound (eZono 4000, Jena, Germany) and 100 mm needles (Stimuplex A, BBraun, Melsungen, Germany) were available during the visit.

Method: From the LGH anesthesia database for period 4/24/17 to 4/27/17 data on all anesthesia cases were obtained. All cases where US trained anesthesiologist was involved were checked for quality of pain relief.

Results: During the study period, 44 cases were done at LGH. 24 (55%) cases were done under general anesthesia (GA), 18 (41%) cases were done under spinal anesthesia, 1 case (2%) was done under monitored anesthesia care and popliteal and adductor canal block were used in 1 case (2%). US anesthesiologist was involved in 25 (57%) of these cases. Two of the local anesthesiologists were actively involved in performing regional blocks under the supervision of US anesthesiologist. They performed bilateral quadratus lumborum type 1 blocks (QLB) in 22 patients after recovery from GA, fascia iliaca block in 1 case and adductor canal block in 1 case for postoperative pain management. Popliteal and adductor canal block were performed in 1 case as anesthesia for lower leg procedure. Twenty one (95%) of 22 patients with QLB had an adequate postoperative pain control. All 3 orthopedic cases with peripheral nerve blocks had an adequate pain control.

Discussion: Similar programs were done before in Serbia in area of obstetric anesthesia (Kybele program).1 Based on the success of the Kybele program, we decided to do a similar program in regional anesthesia. The local team had very limited experience in ultrasound guided blocks and subsequently, number of blocks was limited to 25. During the visit, the expertise of local physicians progressively increased. By day number 4, two members of the department were ready to do blocks on their own.

Conclusion: A several day teaching visit can significantly improve the skills of local anesthesiologists. It is important to focus on few blocks only, so that the local team can gain experience in blocks that their patients need. By concentrating on QLB we achieved satisfactory
performance in two of the local anesthesiologists. We plan to monitor regional anesthesia use at LGH in the next 12 months. Future visits are planned in order to evaluate performance of trained people, teach local anesthesiologists additional peripheral nerve blocks and train physicians from surrounding hospitals.

References: