Abstract:

To gain additional experience in ultrasound-guided procedures, interventional radiology (IR)-bound surgical preliminary interns at an urban community hospital established a difficult intravenous access (DIVA) consult service. This study evaluates the efficacy, safety, and educational value for such a team. The first year of DIVA team results were followed from May 2019 to April 2020. The value of the experience for IR-bound residents vs. categorical general surgery residents (GS) was compared. 239 patients were evaluated by the DIVA team for a total of 4.3 consults per week. General surgery residents performed an additional estimated 2.5 consults per week. For IR residents, 218/230 (94.8%) PIV and 8/9 (88.9%) midline attempts were successful. There were no technical complications that required additional procedural interventions. All residents found educational value in participating in DIVA team. Residents designated to enter IR found participating in the DIVA team to be significantly more beneficial for overall educational value learning identification/access of vessels under ultrasound guidance (P < .01). Interventional radiology residents had a higher mean number of procedures (average 60 vs. 24) before diminishing educational value was noted (P < .05). 100% of GS and IR residents noted that upon entering PGY 2 they felt more adept than their peers at performing ultrasound-guided vascular access and all believed their experience working with DIVA team would benefit them throughout their careers. Establishment of an intern-directed difficult IV access team is beneficial to resident education as well as patient care. Monitoring of case load to avoid service over education is recommended.

Reference: