Conclusions This report should encourage pediatric anesthesiologists to familiarize themselves with ultrasound guided caudal blocks as certain situations will dictate such a need.

**Abstract B30**

**THE IMPACT OF ULTRASOUND GUIDED BRACHIAL PLEXUS BLOCK ON THE OUTCOME OF ARTERIOVENOUS FISTULA CREATION**


Background and Aims Successful vascular access in the upper arm for hemodialysis is crucial for patients with end stage renal insufficiency. Arteriovenous fistula (AVF) is the vascular access of choice in this patient population. Different techniques (general, regional, local anesthesia) have been implemented to produce surgical anesthesia. Regional anesthesia (RA) in the form of ultrasound guided brachial plexus block (UGBPB) has been shown to increase success and maturation rates of AVF, producing perioperative sympathectomy-like effects, vasodilation and increased AVF blood flow. This review seeks to present and synthesize the literature regarding the impact of UGBP on the outcome of AVF creation.

Methods An extensive search of the electronic databases of “PubMed” and “Google Scholar” was conducted using the phrases “anesthesia”, “regional anesthesia”, “brachial plexus block”, “ultrasound guided brachial plexus block”, “regional versus local anesthesia” in combination with “arteriovenous fistula” and “end stage renal disease”.

Results Eight heterogeneous studies reporting on 856 patients were included in this review. They are five randomized controlled and three prospective studies. UGBP was carried out using the supraclavicular, infracavicular or axillary approach. UGBP produced higher AVF blood flow in the early and late postoperative period and higher primary AVF patent rates than local anesthesia. In some studies RA modified the type of AVF.

Conclusions UGBP causing vasodilation by unknown mechanism that mimics parasympathetic nervous system action enhances AVF patency and maybe modifies surgical plan. Large scale, randomized controlled trials, focusing on randomization method, are necessary to produce safe conclusions.

**Abstract B29**

**WHEN REAL TIME ULTRASOUND GUIDED CAUDAL BLOCK IS THE ONLY FEASIBLE OPTION: A CASE REPORT**

1. A Oweidat*, 2. R Karroum, 3. A Farid, 4. A Harb, 5. T Bhalla. 1. Cleveland Clinic, Cleveland, USA; 2. Akron Children’s Hospital, Cleveland, USA; 3. UH Cleveland Medical Center, Cleveland, USA

Background and Aims Kagami ogata syndrome (KOS) patients present with craniofacial dysmorphism, thoraco abdominal abnormalities, and kyphoscoliosis. The choice of regional anesthesia poses a real challenge as the reliance on the usual regional anesthetic techniques including lumbar epidural, paravertebral, fascial plane blocks, and landmark caudal blocks can be very challenging.

Methods We elected to perform a real time ultrasound (US) guided caudal epidural block (CEB) in a patient with a medically challenging spine anamnlyo identify the midline, depth, and level with spread of local anesthesia into the caudal epidural space.

Results All patients remained pain and opioid free and able to mobilise and breath effectively. All patients were very satisfied with analgesia provided by the EOI catheters.

Conclusions With the evolution of regional anaesthesia techniques, the opioid use in acute pain management needs to be re-evaluated. We used the EOI block to provide enhanced recovery analgesia for pancreatoduodenectomy. We have shown that a regional block could be used for step-down analgesia to avoid opioid use and improve outcomes.

**Abstract B28**

**BILATERAL DUAL TAP BLOCK FOR MAJOR ABDOMINAL SURGERY – A SERIES OF CASE REPORTS**

D Paixão, J Moniz*, B Soares, D Coelho. Instituto Português de Oncologia de Lisboa, Lisboa, Portugal

Background and Aims Ultrasound-guided transversus abdominis plane (TAP) block is a regional anaesthesia technique which, as part of a multimodal analgesia regimen, may provide an alternative to epidural analgesia. We report 3 cases of patients where a bilateral dual TAP block (subcostal and lateral approaches) was used to minimize opioid use after major abdominal surgery.

Methods