Background and Aims This retrospective cohort study enrolled 711 patients who underwent unilateral total knee arthroplasty and were divided into four groups: the allogeneic transfusion group (group AT), the autologous transfusion group (group AL), the tranexamic acid group (group TA), and the control group (group C). The primary outcome measured was the rate of postoperative allogeneic blood transfusions. Secondary outcomes included postoperative hemoglobin and hematocrit levels, postoperative bleeding amount, and the incidence of hypotension.

Results The groups AT and AL did not exhibit a significant reduction in postoperative allogeneic blood transfusion rates compared to group C (28/108, p=0.21 and 37/159, p=0.78, respectively). However, group TA demonstrated a significantly lower rate of postoperative allogeneic blood transfusions compared to group C (22/125 vs 3/125; P = 0.0001). The postoperative hemoglobin and hematocrit levels were statistically lower in group TA than in group C, but the levels in groups AT and AL did not differ significantly from those of group C.

Conclusions Our study indicates that intraoperative prophylactic transfusion did not result in a reduction in the postoperative transfusion rate when compared to the control group in patients undergoing total knee arthroplasty. However, the group receiving tranexamic acid showed lower transfusion rates and higher levels of hemoglobin and hematocrit.

IRB approval

Background and Aims Lung hydatid cyst surgery causes considerable postoperative pain, and it can lead to postoperative pulmonary problems particularly in children. The erector spinae plane (ESP) block is a recently described, is simple to perform, and numerous studies have established the analgesic efficacy of ESP block in a variety of therapeutic settings. To compare the analgesic efficacies of erector spinae plane (ESP) block and spinal analgesia (SA) in lung hydatid cyst (LHC) of pediatric surgery

Methods Eighty patients undergoing LHC, divided into two groups: group SA (had morphine spinal analgesia at a dose 3 microgramme/kg) and group ESP (patients had an ultrasound-guided ESP block at the end of surgery with 0.3 ml/kg Ropivacaine). The primary outcome was to compare pain scores at rest 24 h postoperatively between the 2 groups. Secondary outcomes included post operative FLACC scores for 48 h, procedural time, use of rescue medication, adverse events, and parental satisfaction.

Results Patients with ESP block had a better FLACC score than those with SA but no statistical difference at a specific time. Cumulative Paracetamol consumption was higher in the ESP block group (p=0.047). The incidence of overall adverse events in the SA group was higher than in the ESP block group (p=0.045).

Conclusions Erector spinae plane block may be inferior to SA for analgesia following LHC, but it could have tolerable analgesia and a better side effect profile than SA. Therefore, it could be an alternative to SA or thoracic epidural analgesia as a component of multimodal analgesia in children population.