## **COVER LETTER:**

Title: Comparison between the caudal block and other methods of postoperative pain relief in children undergoing circumcision: A prospective randomized study.

Running title: Pediatric caudal anesthesia block for circumcision Institution review board number (IRB number: 70130623).

The study conforms to the provisions of the Declaration of Helsinki in 1995 (as revised in Edinburgh 2000) and it was ethically approved by the Research Committee for Government Hospitals, Salmaniya Medical Complex, Kingdom of Bahrain (IRB number: 70130623).

CONSORT checklist was used for the enrolment and allocation of patients, Children undergoing circumcision surgery under General Anesthesia (GA) with CB Group A and DPNB Group B, and systemic opioid Group C.

inclusion and exclusion standards: After obtaining Informed written consent was obtained from the parents of 90 boys (ASA physical status I), aged from three months up to three years scheduled to undergo circumcision surgery, Exclusion criteria were a history of allergic reactions to local anesthetics, bleeding diatheses, coagulopathy, infection at the injection site, and spinal abnormality, penile abnormalities, neuromuscular disorders, the inclusion criteria for Patients with an ASA Physical Status Classification I is normal levels of liver enzymes. Study design: Prospective, Randomized, Case-controlled Trial Observation study Sample size: all patients for a total of 90 male patients poys going for circumcision surgery, was recruited on 1 May 2023 and the last of August 2023.

## BENEFIT POINTS:

While both caudal block and penile block are effective techniques in providing analgesia in pediatric surgeries, less vomiting, and nausea as side effects of opioids the caudal block is shown to provide a higher level of analgesia and a longer duration of pain relief compared to penile block. Caudal block also offers fewer side effects and a lower requirement for rescue analgesics.

Benefit point: CB provides a highly effective and long duration of analgesia and a safer surgical experience

RISK points: hematoma due to DPNB, Respiratory depression plus nausea and vomiting because of opioids, micturition after caudal blocks, and failed block, CSF aspiration due to puncture Dural

This study aimed to compare the effectiveness of the CB with other methods of postoperative pain release in pediatric who are going to circumcision and obtain the best methods for pain relief with the least side effects.