Background and Aims: Major spinal surgery is a painful procedure requiring very high doses of intraoperative and postoperative opioids [1]. The majority of patients wake up in severe pain with many experiencing side effects from high opiate use [2]. Our primary aim was to investigate if an intraoperative intravenous infusion of ketamine and lidocaine mixture, when added to TIVA practice, improves pain scores in recovery and decreases the opioid amount used perioperatively.

Both groups received perioperative Multimodal Analgesia (MMA): Paracetamol, Clonidine, Magnesium Sulphate and Ketamine boluses (only for the first group, as for the second, Ketamine was added to the infusion).

Methods: A retrospective review of the medical records of patients undergoing major spinal surgery at RNOH was conducted.

The patients were divided into two groups based on the type of main medications received:

- **Group 1**: MMA plus Opioids
- **Group 2**: MMA plus Opioids plus KLI

Opioid doses were converted to morphine equivalents daily.

Results: Pain scores were significantly lower in Group 2, on average, 3 points lower than in Group 1. The opioid doses used in the Group 2 were over 3 times lower than those observed in Group 1. Median opioid dose for the first group was 24 [IQR 12,33] compared to median of 6 [IQR 0,18] for Group 2. Median time to wake up was 3 minutes in Group 2 compared to 20 mins in Group 1.

Conclusions: Our pilot study concluded that Ketamine/Lidocaine infusion significantly decreases the pain scores in recovery and the doses of opioids used postoperatively in the first 24h.

Abstract B334 Figure 1

Abstract B334 Figure 2