

# ANKLE BLOCK COMBINED WITH GENERAL ANAESTHESIA VERSUS SPINAL ANAESTHESIA IN OUTPATIENT FOOT SURGERY

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## Background and Aims

Postoperative pain and immobilization are major problems which negatively affect patient's discharge in outpatient foot surgery (OFS). The aim of this retrospective study was to compare spinal anaesthesia (SA) with general anaesthesia (GA) combined with ankle blocks (AB) in terms of postoperative analgesia and length of hospital stay (LHS) in OFS.

## Methods

After hospital's ethic committee approval, medical records of patients who underwent OFS between June and December 2017 were evaluated. ASA I-II, 87 patients were included in the study; 46 patients had received SA (Group SA) using 15 mg of 0.5% heavy bupivacaine, 41 patients (Group GA/AB) had received GA (propofol-remifentanyl based TIVA) combined with ankle block using 4 ml of local anaesthetic mixture containing 0.5% bupivacaine and 2% lidocaine for nerve blockage. Times to first analgesic requirement and to mobilization, mean analgesic consumption (acetaminophene) and LHS were compared. Discharge from hospital was assessed using Post Anaesthesia Discharge Scoring System (PADSS).

**Table II. Comparison of Postoperative Period Between Groups**

PARAMETER / GROUP	Group GA/AB	Group SA	p*
Time to first analgesic requirement (min)	190 ± 46	125 ± 22	<0.05
Mean analgesic consumption (mg)	560± 40	950± 64	<0.05
Time to mobilization (min)	125 ± 13	320 ± 18	<0.05
Length of Hospital Stay <sup>a</sup> (min)	310 ± 12	545 ± 22	<0.05
Complications	0	3 <sup>b</sup>	<0.05

Abbreviations= GA/AB: General Anaesthesia + Ankle Block ; SA: Spinal Anaesthesia  
 p\* values <0.05 were considered as statistically significant.  
<sup>a</sup> Discharge from hospital was assessed using post anaesthesia discharge scoring system (PADSS).  
<sup>b</sup> Two patients had urinary retention, one had postspinal headache

## Results

Demographic variables and duration of the surgery were similar between groups (Table I). In group GA/AB mean analgesic consumption was lower and the time to first analgesic requirement was higher, while the time to mobilization and LHS were increased in group SA (p<0.05). In group SA, two patients had urinary retention and one patient was admitted to hospital after discharge due to postspinal headache (Table II).

## Conclusions

Combination of ankle blocks with GA has provided superior analgesia and faster discharge with less motor impairment and without bladder dysfunction compared to SA.

**Table I. Demographic Variables and Surgery**

PARAMETER / GROUP	Group GA/AB	Group SA	p*
Number of patients (n)	41	46	>0.05
Sex (F/M)	21/20	24/22	>0.05
Age (year)	57.3 ± 5.5	55.8 ± 3.1	>0.05
Duration of Surgery	115 ± 4	121 ± 3	>0.05
Type of Surgery			
Hallux Valgus Osteotomy (n)	25	27	>0.05
Bunionectomy (n)	15	17	>0.05
Morton's neurectomy (n)	1	2	>0.05

Abbreviations= GA/AB: General Anaesthesia + Ankle Block ; SA: Spinal Anaesthesia  
 p\* values <0.05 were considered as statistically significant.

## References

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