Clinical trial results:
Combined intravenous dexamethasone and dexmedetomidine as adjuncts to popliteal and saphenous nerve blocks in patients undergoing orthopaedic surgery of the foot and ankle. A randomised, blinded, placebo-controlled, parallel clinical trial.

Summary

EudraCT number	2021-000429-28
Trial protocol	DK
Global end of trial date	17 May 2023

Results information

Result version number	v1 (current)
This version publication date	29 March 2024
First version publication date	29 March 2024
Summary attachment (see zip file)	Exploratory outcome results (Supplemental Digital Content 1.pdf)

Trial information

Trial identification

Sponsor protocol code	ADJUNCT-2-2021

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04818749
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Zealand University Hospital
Sponsor organisation address	Lykkebækvej 1, Køge, Denmark, 4600
Public contact	Department of Anaesthesiology, Department of Anaesthesiology, Zealand University Hospital, Køge, Denmark, mmaag@regionsjaelland.dk
Scientific contact	Department of Anaesthesiology, Department of Anaesthesiology, Zealand University Hospital, Køge, Denmark, mmaag@regionsjaelland.dk

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	10 March 2024
Is this the analysis of the primary completion data?	Yes
Primary completion date	17 May 2023
Global end of trial reached?	Yes
Global end of trial date	17 May 2023
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To assess the effects of combined intravenous dexamethasone and dexmedetomidine as adjuncts to popliteal and saphenous nerve blocks in participants undergoing surgery of the ankle or foot.

Protection of trial subjects:

All participants received routine care apart from the experimental interventions.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	03 May 2021
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Denmark: 120
Worldwide total number of subjects	120
EEA total number of subjects	120

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	82
From 65 to 84 years	38
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Participants scheduled for emergency or major ambulatory surgery of the foot or ankle were screened for inclusion. Potential participants were informed of the trial and provided informed consent prior to inclusion in the trial.

Pre-assignment

Screening details:

Age>18, foot or ankle unilateral surgery, general anesthesia combined with popliteal and saphenous nerve block, ASA 1-3, BMI 18-40, min. weight 50kg, ability to provide informed consent.
Exclusion: pregnancy, lack of cooperation, allergy, daily opioid >30mg morphine, daily GCC >5mg prednisone, dysregulated diabetes, alcohol/drug abuse.

Period 1

Period 1 title	Inclusion period (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Investigator, Monitor, Data analyst, Subject, Carer, Assessor

Blinding implementation details:

Trial medication was prepared in identically appearing syringes with equal volume by trained staff not otherwise involved in the trial.

Arms

Are arms mutually exclusive?	Yes
Arm title	Placebo

Arm description:

Participants allocated to placebo received 2 infusions of 20mL of saline. First infusion prior to receiving poplitea and saphenous nerve blocks and second infusion after induction of general anaesthesia.

Arm type	Placebo
Investigational medicinal product name	Saline
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection/infusion
Routes of administration	Infusion

Dosage and administration details:

20 mL of isotonic saline infused prior to block performance and again after induction of general anaesthesia.

Arm title	Dexamethasone

Arm description:

Participants allocated to the dexamethasone group received 2 infusion. The first infusion contained 12 mg of dexamethasone in 20 mL of saline and was administered prior to participants receiving popliteal and saphenous nerve blocks. The second infusion contained 20 mL of saline.

Arm type	Active comparator
Investigational medicinal product name	Dexamethasone
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection/infusion
Routes of administration	Infusion

Dosage and administration details:

3 ml of 4mg/ml of dexamethasone in 17 mL of saline administered over 12 minutes using an infusion pump.

Arm title	Dexamethasone with dexmedetomidine

Arm description:

Participants allocated to dexamethasone with dexmedetomidine received 2 infusions. The first infusion contained 12 mg of dexamethasone in 20 mL of saline and was administered prior to participants receiving popliteal and saphenous nerve blocks. The second infusion contained 1 mcg/kg of dexmedetomidine (actual patient weight) and was administered after induction of general anaesthesia.

Arm type	Experimental
Investigational medicinal product name	Dexamethasone
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection/infusion
Routes of administration	Infusion

Dosage and administration details:

3 ml of 4mg/ml of dexamethasone in 17 mL of saline administered over 12 minutes using an infusion pump.

Investigational medicinal product name	Dexmedetomidine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection/infusion
Routes of administration	Infusion

Dosage and administration details:

1 mcg/kg of dexmedetomidine in 20 ml of saline, infused over 30 minutes using an infusion pump after induction of general anaesthesia.

Number of subjects in period 1	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine
Started	41	40	39
Completed	41	39	39
Not completed	0	1	0
Consent withdrawn by subject	-	1	-

Baseline characteristics

Reporting groups	
Reporting group title	Placebo
Reporting group description:	
Participants allocated to placebo received 2 infusions of 20mL of saline. First infusion prior to receiving poplitea and saphenous nerve blocks and second infusion after induction of general anaesthesia.	
Reporting group title	Dexamethasone
Reporting group description:	
Participants allocated to the dexamethasone group received 2 infusion. The first infusion contained 12 mg of dexamethasone in 20 mL of saline and was administered prior to participants receiving popliteal and saphenous nerve blocks. The second infusion contained 20 mL of saline.	
Reporting group title	Dexamethasone with dexmedetomidine
Reporting group description:	
Participants allocated to dexamethasone with dexmedetomidine received 2 infusions. The first infusion contained 12 mg of dexamethasone in 20 mL of saline and was administered prior to participants receiving popliteal and saphenous nerve blocks. The second infusion contained 1 mcg/kg of dexmedetomidine (actual patient weight) and was administered after induction of general anaesthesia.	

Reporting group values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine
Number of subjects	41	40	39
Age categorical Units: Subjects			
In utero Preterm newborn infants (gestational age < 37 wks) Newborns (0-27 days) Infants and toddlers (28 days-23 months) Children (2-11 years) Adolescents (12-17 years) Adults (18-64 years) From 65-84 years 85 years and over			
Age continuous Units: years			
arithmetic mean	56	56	53
standard deviation	± 16	± 17	± 18
Gender categorical Units: Subjects			
Female	22	30	24
Male	19	10	15
Diabetes Units: Subjects			
Diabetes	0	1	0
No diabetes	41	39	39
Type of surgery Units: Subjects			
Fracture	32	23	25
Arthrodesis	9	17	14

Habitual use of analgesics Units: Subjects			
Acetaminophen/paracetamol	12	15	19
NSAIDs	6	7	9
Opioids	3	1	2
No use	20	17	9
Weight			
Weight			
Units: kilogram(s)			
arithmetic mean	84	79	85
standard deviation	± 18	± 13	± 17
Height			
Height			
Units: centimetre			
arithmetic mean	173	171	174
standard deviation	± 10	± 10	± 9
BMI			
Body Mass Index			
Units: kilogram(s)/cubic metre			
arithmetic mean	173	171	174
standard deviation	± 10	± 10	± 9
Duration of surgery			
Duration of surgery from induction of general anaesthesia until extubation.			
Units: minute			
median	148	158	142
inter-quartile range (Q1-Q3)	115 to 175	113 to 197	107 to 179
Pre-operative pain level			
Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst pain)			
Units: points			
median	1	3	1
inter-quartile range (Q1-Q3)	0 to 2	1 to 4	0 to 3.5

Reporting group values	Total		
Number of subjects	120		
Age categorical Units: Subjects			
In utero	0		
Preterm newborn infants (gestational age < 37 wks)	0		
Newborns (0-27 days)	0		
Infants and toddlers (28 days-23 months)	0		
Children (2-11 years)	0		
Adolescents (12-17 years)	0		
Adults (18-64 years)	0		
From 65-84 years	0		
85 years and over	0		
Age continuous Units: years			
arithmetic mean			
standard deviation	-		

Gender categorical Units: Subjects			
Female	76		
Male	44		
Diabetes Units: Subjects			
Diabetes	1		
No diabetes	119		
Type of surgery Units: Subjects			
Fracture	80		
Arthrodesis	40		
Habitual use of analgesics Units: Subjects			
Acetaminophen/paracetamol	46		
NSAIDs	22		
Opioids	6		
No use	46		
Weight			
Weight			
Units: kilogram(s)			
arithmetic mean			
standard deviation	-		
Height			
Height			
Units: centimetre			
arithmetic mean			
standard deviation	-		
BMI			
Body Mass Index			
Units: kilogram(s)/cubic metre			
arithmetic mean			
standard deviation	-		
Duration of surgery			
Duration of surgery from induction of general anaesthesia until extubation.			
Units: minute			
median			
inter-quartile range (Q1-Q3)	-		
Pre-operative pain level			
Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst pain)			
Units: points			
median			
inter-quartile range (Q1-Q3)	-		

End points

End points reporting groups

Reporting group title	Placebo
Reporting group description:	
Participants allocated to placebo received 2 infusions of 20mL of saline. First infusion prior to receiving poplitea and saphenous nerve blocks and second infusion after induction of general anaesthesia.	
Reporting group title	Dexamethasone
Reporting group description:	
Participants allocated to the dexamethasone group received 2 infusion. The first infusion contained 12 mg of dexamethasone in 20 mL of saline and was administered prior to participants receiving popliteal and saphenous nerve blocks. The second infusion contained 20 mL of saline.	
Reporting group title	Dexamethasone with dexmedetomidine
Reporting group description:	
Participants allocated to dexamethasone with dexmedetomidine received 2 infusions. The first infusion contained 12 mg of dexamethasone in 20 mL of saline and was administered prior to participants receiving popliteal and saphenous nerve blocks. The second infusion contained 1 mcg/kg of dexmedetomidine (actual patient weight) and was administered after induction of general anaesthesia.	

Primary: Duration of analgesia

End point title	Duration of analgesia
End point description:	
Participants were instructed to note the time and date of their first sensation of pain (above 0 on the Numerical Rating Scale). The duration of analgesia was defined as the time from block performance until first sensation of pain.	
End point type	Primary
End point timeframe:	
From block performance until block resolution	

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: minute				
median (inter-quartile range (Q1-Q3))	870 (748 to 1138)	1400 (1133 to 1750)	1572 (1259 to 1715)	

Statistical analyses

Statistical analysis title	Placebo versus dexa
Statistical analysis description:	
Hodges-Lehmann for estimating between group pseudo-median differences and Van Elteren test adjusted for site for p-value.	
Comparison groups	Dexamethasone v Placebo

Number of subjects included in analysis	80
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.001
Method	Van Elteren
Parameter estimate	Pseudomedian difference
Point estimate	489
Confidence interval	
level	Other: 98.3 %
sides	2-sided
lower limit	265
upper limit	706

Statistical analysis title	Placebo versus dexa+dexmed
Statistical analysis description:	
Hodges-Lehmann for estimating between group pseudo-median differences and Van Elteren test adjusted for site for p-value.	
Comparison groups	Placebo v Dexamethasone with dexmedetomidine
Number of subjects included in analysis	80
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.001
Method	Van Elteren
Parameter estimate	Pseudomedian difference
Point estimate	564
Confidence interval	
level	Other: 98.3 %
sides	2-sided
lower limit	301
upper limit	794

Statistical analysis title	Dexa versus dexa + dexmed
Statistical analysis description:	
Hodges-Lehmann for estimating between group pseudo-median differences and Van Elteren test adjusted for site for p-value.	
Comparison groups	Dexamethasone with dexmedetomidine v Dexamethasone
Number of subjects included in analysis	78
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 1.67
Method	Van Elteren
Parameter estimate	Pseudomedian difference
Point estimate	61

Confidence interval	
level	Other: 98.3 %
sides	2-sided
lower limit	-222
upper limit	331

Secondary: Duration of motor block

End point title	Duration of motor block

End point description:

End point type	Secondary

End point timeframe:

From block performance until first ability to activate calf muscles.

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	36	39	35	
Units: minute				
median (inter-quartile range (Q1-Q3))	1075 (794 to 1306)	1348 (1177 to 1549)	1445 (1128 to 1674)	

Statistical analyses

Statistical analysis title	Placebo vs dexa
Comparison groups	Placebo v Dexamethasone
Number of subjects included in analysis	75
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.014
Method	VanElteren
Parameter estimate	Hodges-Lehmann pseudomedian difference
Point estimate	289
Confidence interval	
level	95 %
sides	2-sided
lower limit	60
upper limit	480

Statistical analysis title	Placebo vs dexa+dexmed

Comparison groups	Placebo v Dexamethasone with dexmedetomidine
Number of subjects included in analysis	71
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.012
Method	VanElteren
Parameter estimate	Hodges-Lehmann pseudomedian difference
Point estimate	306
Confidence interval	
level	95 %
sides	2-sided
lower limit	85
upper limit	518

Statistical analysis title	Dexa vs dexa+dexmed
Comparison groups	Dexamethasone v Dexamethasone with dexmedetomidine
Number of subjects included in analysis	74
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.014
Method	VanElteren
Parameter estimate	Hodges-Lehmann pseudomedian difference
Point estimate	62
Confidence interval	
level	95 %
sides	2-sided
lower limit	-165
upper limit	225

Secondary: Quality of sleep night 1

End point title	Quality of sleep night 1
End point description:	
Measured on the Numerical Rating Scale 0-10 points (0 worst, 10 best)	
End point type	Secondary
End point timeframe:	
Postoperative night 1	

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				

median (inter-quartile range (Q1-Q3))	4 (2 to 6)	5 (3 to 7.5)	5 (3.5 to 8)	

Statistical analyses

No statistical analyses for this end point

Secondary: Quality of sleep night 2

End point title	Quality of sleep night 2
End point description: Measured on the Numerical Rating Scale 0-10 points (0 worst, 10 best)	
End point type	Secondary
End point timeframe: Second postoperative night	

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	6 (6 to 8)	6 (4 to 8)	6 (5 to 8)	

Statistical analyses

No statistical analyses for this end point

Secondary: Quality of sleep night 3

End point title	Quality of sleep night 3
End point description: Measured on the Numerical Rating Scale 0-10 points (0 worst, 10 best)	
End point type	Secondary
End point timeframe: Third postoperative night	

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	8 (6 to 9)	8 (6 to 9)	7 (6 to 9)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Pain at rest 24 hours postoperatively

End point title	Pain at rest 24 hours postoperatively

End point description:

Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst perceiveable pain)

End point type	Other pre-specified

End point timeframe:

24 hours postoperatively

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	4 (2 to 6)	3 (0 to 5)	1 (0 to 4)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Pain at rest 48 hours postoperatively

End point title	Pain at rest 48 hours postoperatively

End point description:

Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst pain)

End point type	Other pre-specified

End point timeframe:

48 hours postoperatively

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	3 (1 to 4)	3 (1 to 5)	2 (1 to 4)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Pain at rest 72 hours postoperatively

End point title	Pain at rest 72 hours postoperatively
End point description:	
Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst pain)	
End point type	Other pre-specified
End point timeframe:	
72 hours postoperatively	

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	1 (0 to 3)	1.5 (0 to 3.8)	2 (0 to 3.5)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Average pain 0-24 hours

End point title	Average pain 0-24 hours
End point description:	
Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst pain)	
End point type	Other pre-specified
End point timeframe:	
0-24 hours postoperatively	

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	4 (2 to 5)	2 (0 to 3.5)	1 (0 to 2)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Average pain 24-48 hours

End point title	Average pain 24-48 hours

End point description:

Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst pain)

End point type	Other pre-specified

End point timeframe:

24-48 hours postoperatively

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	3 (2 to 4)	4 (2 to 6)	3 (2 to 5)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Average pain 48-72 hours

End point title	Average pain 48-72 hours

End point description:

Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst pain)

End point type	Other pre-specified

End point timeframe:

48-72 hours postoperatively

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	3 (2 to 4)	2.5 (1 to 4)	2 (1 to 4)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Worst pain 0-24 hours

End point title	Worst pain 0-24 hours

End point description:

Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst pain)

End point type	Other pre-specified

End point timeframe:

0-24 hours postoperatively

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	8 (6 to 9)	5 (0.5 to 6)	3 (0 to 6)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Worst pain 24-48 hours

End point title	Worst pain 24-48 hours

End point description:

Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst pain)

End point type	Other pre-specified

End point timeframe:

24-48 hours postoperatively

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	6 (4 to 7)	6 (4 to 8)	6 (4 to 8)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Worst pain 48-72 hours

End point title	Worst pain 48-72 hours

End point description:

Measured on the Numerical Rating Scale 0-10 points (0 no pain, 10 worst pain)

End point type	Other pre-specified

End point timeframe:

48-72 hours postoperatively

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: points				
median (inter-quartile range (Q1-Q3))	4 (2 to 6)	5 (2 to 6)	4 (2 to 7)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Cumulative opioid consumption 0-24 hours

End point title	Cumulative opioid consumption 0-24 hours

End point description:

Cumulative opioid consumption measured as oral oxycodone equivalents

End point type	Other pre-specified

End point timeframe:

0-24 hours postoperatively

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: milligram(s)				
median (inter-quartile range (Q1-Q3))	20 (10 to 38)	5 (0 to 10)	0 (0 to 15)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Cumulative opioid consumption 0-48 hours

End point title	Cumulative opioid consumption 0-48 hours

End point description:

Cumulative opioid consumption measured in oral oxycodone equivalents

End point type	Other pre-specified

End point timeframe:

0-48 hours postoperatively

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: milligram(s)				
median (inter-quartile range (Q1-Q3))	42 (15 to 78)	30 (15 to 45)	15 (3 to 53)	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Cumulative opioid consumption 0-72 hours

End point title	Cumulative opioid consumption 0-72 hours

End point description:

Cumulative opioid consumption measured as oral oxycodone equivalents

End point type	Other pre-specified

End point timeframe:

0-72 hours postoperatively

End point values	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	41	39	39	
Units: milligram(s)				
median (inter-quartile range (Q1-Q3))	65 (25 to 97)	38 (15 to 78)	25 (5 to 78)	

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse events were collected in the intervention period until 72 hours postoperatively

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	27

Reporting groups

Reporting group title	Placebo

Reporting group description:

Participants allocated to placebo received 2 infusions of 20mL of saline. First infusion prior to receiving poplitea and saphenous nerve blocks and second infusion after induction of general anaesthesia.

Reporting group title	Dexamethasone

Reporting group description:

Participants allocated to the dexamethasone group received 2 infusion. The first infusion contained 12 mg of dexamethasone in 20 mL of saline and was administered prior to participants receiving popliteal and saphenous nerve blocks. The second infusion contained 20 mL of saline.

Reporting group title	Dexamethasone with dexmedetomidine

Reporting group description:

Participants allocated to dexamethasone with dexmedetomidine received 2 infusions. The first infusion contained 12 mg of dexamethasone in 20 mL of saline and was administered prior to participants receiving popliteal and saphenous nerve blocks. The second infusion contained 1 mcg/kg of dexmedetomidine (actual patient weight) and was administered after induction of general anaesthesia.

Serious adverse events	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 41 (2.44%)	2 / 40 (5.00%)	0 / 39 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0
Investigations			
Infection	Additional description: Suspected deep tissue infection requiring hospitalisation that was subsequently ruled out		
subjects affected / exposed	0 / 41 (0.00%)	1 / 40 (2.50%)	0 / 39 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Vascular disorders			
Ischaemic cerebral infarction	Additional description: Hospitalised for suspected stroke which was subsequently ruled out.		
subjects affected / exposed	0 / 41 (0.00%)	1 / 40 (2.50%)	0 / 39 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Gastrointestinal disorders			
Constipation			
subjects affected / exposed	1 / 41 (2.44%)	0 / 40 (0.00%)	0 / 39 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	Placebo	Dexamethasone	Dexamethasone with dexmedetomidine
Total subjects affected by non-serious adverse events			
subjects affected / exposed	11 / 41 (26.83%)	10 / 40 (25.00%)	4 / 39 (10.26%)
Nervous system disorders			
Syncope			
subjects affected / exposed	0 / 41 (0.00%)	2 / 40 (5.00%)	1 / 39 (2.56%)
occurrences (all)	0	2	1
Dizziness			
subjects affected / exposed	0 / 41 (0.00%)	2 / 40 (5.00%)	0 / 39 (0.00%)
occurrences (all)	0	2	0
General disorders and administration site conditions			
Malaise			
subjects affected / exposed	1 / 41 (2.44%)	2 / 40 (5.00%)	1 / 39 (2.56%)
occurrences (all)	1	2	1
Pyrexia			
subjects affected / exposed	1 / 41 (2.44%)	0 / 40 (0.00%)	0 / 39 (0.00%)
occurrences (all)	1	0	0
Chills			
subjects affected / exposed	4 / 41 (9.76%)	3 / 40 (7.50%)	0 / 39 (0.00%)
occurrences (all)	4	3	0
Haemorrhage	Additional description: Bandage seep through		
subjects affected / exposed	1 / 41 (2.44%)	1 / 40 (2.50%)	1 / 39 (2.56%)
occurrences (all)	1	1	1
Immune system disorders			
Urticaria			
subjects affected / exposed	1 / 41 (2.44%)	0 / 40 (0.00%)	0 / 39 (0.00%)
occurrences (all)	1	0	0
Gastrointestinal disorders			

Constipation			
subjects affected / exposed	1 / 41 (2.44%)	0 / 40 (0.00%)	1 / 39 (2.56%)
occurrences (all)	1	0	1
Nausea			
subjects affected / exposed	2 / 41 (4.88%)	3 / 40 (7.50%)	0 / 39 (0.00%)
occurrences (all)	2	3	0
Vomiting			
subjects affected / exposed	2 / 41 (4.88%)	2 / 40 (5.00%)	0 / 39 (0.00%)
occurrences (all)	2	2	0
Reflux gastritis			
subjects affected / exposed	1 / 41 (2.44%)	0 / 40 (0.00%)	0 / 39 (0.00%)
occurrences (all)	1	0	0

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported