Clinical trial results:
A Randomised Prospective Pilot Study Comparing the Outcomes of Patients with Lumbar Nerve Root Pain Secondary to Lumbar Disc Prolapse Treated by Nerve Root Block with or without the Addition of Clonidine.

Summary

EudraCT number	2010-023262-46
Trial protocol	GB
Global end of trial date	19 February 2015

Results information

Result version number	v1 (current)
This version publication date	21 September 2019
First version publication date	21 September 2019

Trial information

Trial identification

Sponsor protocol code	20101005PH

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	RD+E Hospital NHSFT
Sponsor organisation address	Barrack Road, Exeter, United Kingdom, EX2 5DW
Public contact	Miss J Lowe, R+D Department, 0044 1392406933, joanne.lowe3@nhs.net
Scientific contact	Miss J Lowe, R+D Department, 0044 1392406933, joanne.lowe3@nhs.net

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	19 February 2015
Is this the analysis of the primary completion data?	Yes
Primary completion date	19 February 2015
Global end of trial reached?	Yes
Global end of trial date	19 February 2015
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

In patients with sciatica having MRI proof of disc prolapse, does Clonidine and standard root block compared with standard root block alone (marcaine anaesthetic plus steroid), result in less pain, improved function and quality of life and prevention of further secondary care intervention (repeat injections, surgery and GP visits)?

Protection of trial subjects:

There is the potential for patients who are given clonidine to experience a potentially severe drop in blood pressure. We have taken the advice of a consultant in anaesthetics about this. She has recommended that all study participants should have an intra-venous cannula inserted so that appropriate medication can be adminstered quickly in the event of a sudden blood pressure drop. She has also recommended that blood pressure is monitored at 10 minute intervals for the first hour and 15 minute intervals for the second hour after administration of the injection.Patients are to be kept in hospital for 4 hours post-injection. Any blood pressure change will have come to light by then.

Background therapy:

nil

Evidence for comparator:

Lumbar nerve root pain secondary to disc prolapse is common. 90% of patients will have a good or excellent outcome at 1 year without undergoing surgical management. For many patients, the nerve root pain is so severe that waiting for natural resolution is unacceptable. Surgery to remove the piece of disc pressing on the nerve is one treatment option. Not all patients who undergo surgical care are satisfied with up to 20% of patients dissatisfied with the result. Lumbar nerve root blocks are a common procedure used in these cases to try and provide short term symptomatic relief and to allow the patients to function more normally whilst awaiting the potential for natural resolution of the complaint. Success rate of such injections varies. Studies have shown that between 53 and 60% of people who were listed to have surgery, did not need to proceed as the injection significantly reduced their pain. There remains however, a need for a more effective, longer term non-surgical procedure as a surgery sparing procedure.

Actual start date of recruitment	12 July 2011
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	United Kingdom: 100
Worldwide total number of subjects	100
EEA total number of subjects	100

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)	100
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

All participants recruited 12/07/11 to 08/08/13 in UK

Pre-assignment

Screening details:

55 participants screened and excluded: 22 declined study entry, 11 spontaneously resolved, 8 had previous intervention, 7 exceeded age criteria, 5 had cardiac issues, 2 had poor language skills
100 participants met inclusion criteria

Pre-assignment period milestones

Number of subjects started	100
Number of subjects completed	100

Period 1

Period 1 title	overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Single blind
Roles blinded	Subject

Blinding implementation details:

Participants were informed that they would not be told study arm allocation. Anonymised data was sent to an independent statistician for analysis. They were only given a unique study identity number for identification

Arms

Are arms mutually exclusive?	Yes
Arm title	Standard treatment arm

Arm description:

Patients undergoing lumber nerve root block injection using the standard regimen of 1% lidocaine to the skin as local anaesthetic, with 40 milligrams of kenalog and 3 mls of 0.25% marcain for the injection

Arm type	Active comparator
Investigational medicinal product name	Kenalog and marcain
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Epidural use

Dosage and administration details:

40 milligrams kenalog and 3 mls 0.25% marcain given as transforaminal epidural steroid injection

Arm title	Intervention arm

Arm description:

The addition of 75 mcg clonidine hypochloride to the standard nerve root block injection

Arm type	Experimental
Investigational medicinal product name	clonidine hypochloride
Investigational medicinal product code	
Other name	Catapres
Pharmaceutical forms	Solution for injection
Routes of administration	Epidural use

Dosage and administration details:

75 micrograms given as transforaminal epidural steroid injection - added to the standard nerve root

block of 3mls of 0.25% marcain and 40 mg kenalog

Number of subjects in period 1	Standard treatment arm	Intervention arm
Started	50	50
6 week post-injection follow-up	50	50
Completed	50	50

Baseline characteristics

Reporting groups	
Reporting group title	overall trial

Reporting group description: -

Reporting group values	overall trial	Total	
Number of subjects	100	100	
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			
Age			
Units: years			
arithmetic mean	42		
standard deviation	± 10.6	-	
Gender categorical			
Gender			
Units: Subjects			
Female	57	57	
Male	43	43	

End points

End points reporting groups

Reporting group title	Standard treatment arm
Reporting group description:	
Patients undergoing lumber nerve root block injection using the standard regimen of 1% lidocaine to the skin as local anaesthetic, with 40 milligrams of kenalog and 3 mls of 0.25% marcain for the injection	
Reporting group title	Intervention arm
Reporting group description:	
The addition of 75 mcg clonidine hypochloride to the standard nerve root block injection	

Primary: Success or failure

End point title	Success or failure
End point description:	
The procedure was deemed a success if no further intervention (further injection or surgery) was required within 1 year of the injection	
End point type	Primary
End point timeframe:	
1 year after injection	

End point values	Standard treatment arm	Intervention arm		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	50	50		
Units: Success or failure	50	50		

Statistical analyses

Statistical analysis title	Success or failure: outcome by group
Comparison groups	Standard treatment arm v Intervention arm
Number of subjects included in analysis	100
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.05
Method	Chi-squared
Parameter estimate	Median difference (final values)

Adverse events

Adverse events information[1]	
Timeframe for reporting adverse events:	
From time of injection to 6 weeks post-injection follow-up	
Adverse event reporting additional description:	
No adverse events were reported. 4 hour monitoring immediately post injection and direct questioning at 6 week post-injection follow up clinic attendance	
Assessment type	Non-systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	17

Frequency threshold for reporting non-serious adverse events: 5 %

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.
Justification: None reported

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
28 December 2011	1 amendment occurred to change the name of the Chief Investigator on the study consent form and to outline that members of the regulatory authorities may access trial information for monitoring, audit and safety purposes

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

nil

Notes: