

# Multicentre trial of continuous Positive Airway Pressure for chronic therapy of heart failure

<b>Submission date</b> 17/06/2005	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 17/06/2005	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 14/04/2010	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
UCT-14909

# Study information

## Scientific Title

## Acronym

CANPAP

## Study objectives

To test the effect of continuous positive airway pressure (CPAP) on the combined rate of death and cardiac transplantation in congestive heart failure (CHF) patients with central sleep apnoea (CSA)

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

The research ethics board of each institution approved the protocol:

1. Canada: University of Calgary, University of Alberta, University of Western Ontario, McGill University, Laval University, University of Toronto (site A: Toronto General Hospital of the University Health Network, site B: St. Michael's Hospital), University of British Columbia, University of Manitoba
2. Germany: University of Regensburg

## Study design

Randomised controlled trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Other

## Study type(s)

Treatment

## Participant information sheet

## Health condition(s) or problem(s) studied

Congestive heart failure

## Interventions

Control group: Standard drug therapy for CHF

Experimental group: CPAP in addition to standard drug therapy

Both groups will be closely followed for an average of approximately 2.5 years. Assessments at one, three and six months, two years and end of trial.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome measure**

Combined death-heart transplantation rate

**Secondary outcome measures**

1. Changes in resting LVEF
2. Left ventricular end diastolic volume (LVEDV), left ventricular end systolic volume (LVESV)
3. Distance walked on a six minute walk test
4. New York Heart Association (NYHA) functional class
5. Quality of life
6. Sleep quality
7. Frequency of apnoeas and hypopnoeas
8. Mean and minimal saturation of oxygen (SaO2) from baseline
9. Number of admissions and total days spent in hospital over the entire trial period

**Overall study start date**

01/12/1998

**Completion date**

31/05/2004

**Eligibility****Key inclusion criteria**

1. Male and females between the age of 18 and 79 with history of at least one clinical episode of CHF due to ischaemic heart failure
2. Left ventricular (LV) systolic dysfunction as evidenced by a left ventricular ejection fraction (LVEF) at rest determined by equilibrium radionuclide angiography of less than 40% while on optimal drug therapy at the time of recruitment
3. New York Heart Association (NYHA) functional class two to four
4. Stable condition and stable optimal cardiac medications for at least one month prior to entry
5. Presence of central sleep apnoea defined as more than or equal to 15 apnoeas and hypopnoeas per hour of sleep of which more than 50% must be central in nature
6. Written informed consent

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

408

**Key exclusion criteria**

1. History of unstable angina, cardiac surgery and/or documented myocardial infarction less than three months prior to entry into the study
2. Acceptance for cardiac transplantation
3. Sleep apnea which is predominantly (i.e. more than or equal to 50%) obstructive in nature
4. Concurrent disease that would markedly limit life expectancy (e.g. lung cancer)
5. Pregnancy

**Date of first enrolment**

01/12/1998

**Date of final enrolment**

31/05/2004

## **Locations**

**Countries of recruitment**

Canada

**Study participating centre**

**Toronto General Hospital-UHN**

Toronto, Ontario

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## **Sponsor information**

**Organisation**

University Health Network (Toronto) (Canada)

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**Sponsor type**

University/education

**Website**

<http://www.uhn.ca>

**ROR**

<https://ror.org/042xt5161>

## Funder(s)

**Funder type**

Research organisation

**Funder Name**

Canadian Institutes of Health Research (CIHR) (Canada) - <http://www.cihr-irsc.gc.ca> (ref: UCT-14909)

## Results and Publications

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>	protocol	01/06/2001		Yes	No
<a href="#">Results article</a>	results	10/11/2005		Yes	No
<a href="#">Results article</a>	results	26/06/2007		Yes	No
<a href="#">Results article</a>	results	01/01/2009		Yes	No
<a href="#">Results article</a>	results	01/03/2010		Yes	No