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Participant Information Sheet/Consent Form

Interventional Study - *Adult providing own consent*

Lyell McEwin Hospital

Title	Pilot Study on the Prevalence of Obstructive Sleep Apnoea in Angina and No Obstructive Coronary Artery Disease: A Randomised Evaluation of the Effectiveness of Continuous Positive Airway Pressure Therapy. (HREC/17/TQEH/177)
Protocol Number	Version 4, dated 16th December 2017
Principal Investigator	A/Prof Margaret Arstall
Associate Investigators	John Beltrame, Sharmalar Rajendran, Purendra Pati, Devan Mahadavan, Eng Lee Ooi, Doug McEvoy, Khin Hnin, James Geake, Matthew Chapman, Rosanna Tavella, Emily Aldridge, Melanie Wittwer

Part 1 What does my participation involve?

1. Introduction

You are invited to take part in the research project because you have been participant in the study of "Coronary and Peripheral Haemodynamic Studies in Angina with No Obstructive Coronary Artery Disease and International COVADIS Registry" (HREC/17/TQEH/156)

This Participant Information Sheet and Consent Form tells you about the research project. It explains the tests and research involved. Knowing what is involved will help you decide if you want to take part in the research.

Please read this information carefully. Ask questions about anything that you don't understand or want to know more about. Before deciding whether or not to take part, you might want to talk about it with a relative, friend or local doctor.

Participation in this research is voluntary. If you don't wish to take part, you don't have to. You will receive the best possible care whether or not you take part.

If you decide you want to take part in the research project, you will be asked to sign the consent section. By signing it, you are telling us that you:

- Understand what you have read
- Consent to take part in the research project
- Consent to the tests and research that are described
- Consent to the use of your personal and health information as described.

You will be given a copy of this Participant Information and Consent Form to keep.

2. What is the purpose of this research?

Obstructive sleep apnoea is a breathing pattern disorder during sleep which is commonly seen in people who snore and is thought to be a risk factor for cardiovascular disease. It has been reported that individuals with obstructive sleep apnoea can have suspected angina with an "apparent' normal coronary angiogram and coronary microvascular dysfunction and vasospastic angina. It is unknown if this occurs in the Australian population. The underlying mechanisms for obstructive sleep apnoea increasing cardiovascular risks is not understood. This research project will provide information about the relationship between obstructive sleep apnoea and coronary artery/peripheral artery blood flow, and may inform what are the clinical predictors of angina in patients with obstructive sleep apnoea.

This research has been initiated by the study doctor, A/Prof Margaret Arstall, and is supported by Lyell McEwin Hospital Cardiology funding. The obstructive sleep apnoea therapy will be sponsored by Philips Electronic Australia for 6 months for each participant with significant obstructive sleep apnoea.

3. What does participation in this research involve?

You will be asked to sign the consent form prior to any research project assessments being performed. To be eligible for this research project, you must be a patient at the Lyell McEwin Hospital.

There are no costs associated with participating in this research project, nor will you be paid.

What procedures will I be asked to submit to and what will be the likely effects?

Sleep Study:

- If you have angina but no significant coronary artery disease found on your coronary angiogram , you will be screened for obstructive sleep apnoea by an overnight home sleep study within 4 weeks of the coronary angiogram.
- A sleep physician will review your result and provide you with the diagnosis, educate and assess your suitability for Continuous Positive Airway Pressure therapy. If you do not have significant obstructive sleep apnoea, you may be asked to be part of a control group
- Standard obstructive sleep apnoea related questionnaires will be completed. (Take about 10 minutes to complete).

Continuous Positive Airway Pressure (CPAP) Therapy:

- CPAP equipment has three basic parts. The first is an air pump. The second is a mask that covers the nostrils or nose and sometimes the mouth. The third is a tube to link the two. The CPAP pump takes air from the room and gently pressurises it. The air blows through the tube and mask into the throat. The pressure of the air keeps the throat open while you are asleep, this therapy usually effectively treats the snoring and any breathing changes associated with obstructive sleep apnoea.
- If you have obstructive sleep apnoea, you will be randomly allocated to immediate CPAP therapy for 6 months and 6 months without CPAP or delayed CPAP therapy for 6 months after a 6 month observation period in a 1 to 1 fashion, ie you will have a 50/50 chance of having CPAP in the first 6 months or in the second 6 months.

- You will be given information and training about the CPAP therapy The CPAP therapy period will commence using an AutoCPAP machine for at least 1 week to measure the effective pressure you require, and the required pressure will be set on your fixed pressure CPAP machine.
- The effectiveness and use of the CPAP machine will be available to the research staff electronically via remote downloading.
- Satisfactory use of CPAP therapy will be assessed by an experienced Sleep Physician. (Average usage time required is greater than 4 hours per night)
- You will be able to contact the CPAP supplier to troubleshoot if any problems arise.
- The immediate CPAP therapy group will be reviewed at baseline, 1 month (by phone), 3 months (by phone), and 6 months by the Sleep Physician.
- The delayed CPAP therapy group will be reviewed by the Sleep Physician at 6 months (baseline before CPAP therapy),7 months (by phone), 9 months (by phone) and 12 months.
- If there are any problems with mask leaks or the CPAP machine, you should contact the CPAP machine provider as soon as possible during working hours (9am to 4pm), Monday to Friday. Their contact details will be provided to you when you receive your CPAP machine.

The non-invasive tests of Low dose Dobutamine Stress Echocardiography, TensioMed Arteriography and Retinal photography will be performed at baseline and repeated at 6 months and 12 months follow-up together with the questionnaires. These tests are exactly the same as the ones performed 2 weeks after your coronary angiography in the earlier research project.

If you do not have obstructive sleep apnoea and have agreed to be part of the control group, you will have the above non-invasive tests and questionnaires performed at 6 and 12 months follow-up.

What treatment will I get if I do take part? Will this be different from the treatment I would get otherwise?
This study will not affect the treatment that you receive from your treating doctor for managing your chest pain. If you have obstructive sleep apnoea, you will receive 6 months treatment with CPAP therapy. If the Sleep Physician considers you need to continue CPAP therapy after the research project arrangements will be made to refer you to an appropriate provider and inform your local doctor.

Will I have to come back to the clinic more often or remain in hospital for longer than would normally be the case?
No - Your participation in this study will not affect your inpatient stay.

All participants, ie. with or without obstructive sleep apnoea, will have non-invasive testing and questionnaires performed at 6 months and 12 months at the Lyell McEwin Hospital Clinical Trial Unit.

What will I be asked to do at each visit?
This study's visits will be integrated into the visits on the study of "Coronary and Peripheral Haemodynamic Studies in Angina with No Obstructive Coronary Artery Disease and International COVADIS Registry" (HREC/17/TQEH/156). A total of 3 on site visits at the Lyell McEwin Hospital Clinical Trial Unit. See the attached "Visit Schedule".

Obstructive Sleep Apnoea Group (Immediate therapy):

- Visit 1 (Baseline)
  - Your diagnosis will be explained by the Sleep Physician.
  - You will have been randomly allocated (like a toss of a coin) into the immediate CPAP therapy group.
  - The Cardiologist will have you complete several questionnaires about your angina burden and control of symptoms – should take approximately 45 minutes.
  - The CPAP therapy provider will educate you on the CPAP device, mask fitting and trouble shooting.
- 1st month and 3rd month CPAP therapy review will be performed by phone.
  - The Sleep Physician and CPAP therapy provider will review any issues with the CPAP therapy and make necessary adjustment.
- Visit 2 (6 months)
  - Standard Sleep Physician review.
  - Return of the CPAP machine to the CPAP therapy provider.
  - The Cardiologist will perform the non-invasive tests and have you complete several questionnaires about your angina burden and control of symptoms.
  - You will be observed without CPAP therapy for 6 months.
- Visit 3 (12 months)
  - Standard Sleep Physician review.
  - The Cardiologist will perform the non-invasive tests followed by having you complete several questionnaires regarding angina burden and control of symptoms.

Obstructive Sleep Apnoea Group (Delayed therapy):

- Visit 1 (Baseline)
  - Your diagnosis will be explained by the Sleep Physician.
  - You will have been randomly allocated (like the toss of a coin) into the delayed CPAP therapy group.
  - The Cardiologist will have you complete several questionnaires about angina burden and control of symptoms.
  - You will be observed without CPAP therapy for 6 months.
- Visit 2 (6 months)
  - The Cardiologist will perform the non-invasive tests and have you complete several questionnaires regarding angina burden and control of symptoms.
  - The CPAP therapy provider will educate you on the CPAP machine, mask fitting and trouble shooting.
  - Standard Sleep Physician review.
- 1st month and 3rd month CPAP therapy review will be performed by phone.
  - The Sleep Physician and CPAP therapy provider will review any issues with the CPAP therapy and make necessary adjustment.
- Visit 3 (12 months)
  - Standard Sleep Physician review.
  - Return of the CPAP machine to the CPAP therapy provider.
  - The Cardiologist will perform the non-invasive tests and have you complete several questionnaires about angina burden and control of symptoms.

No Obstructive Sleep Apnoea or Control Group:

- Visit 1 (Baseline)
  - Your diagnosis will be explained by the Sleep Physician.
  - The Cardiologist will have you complete several questionnaires about angina burden and control of symptoms.
- Visit 2 (6 months)
  - The Cardiologist will perform the non-invasive tests and have you complete several questionnaires about angina burden and control of symptoms.
- Visit 3 (12 months)
  - The Cardiologist will perform the non-invasive tests and have you complete several questionnaires about angina burden and control of symptoms.

How long will my participation in the research project last?
You will be in the study for 12 months.

4. Other relevant information about the research project.

We expect that around 60 patients with angina will participate in this study at the Lyell McEwin Hospital.

5. Do I have to take part in the research project?

Participation in any research project is voluntary. If you do not wish to take part, you do not have to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage If you do decide to take part, you will be given this Participant Information and Consent Form to sign and you will be given a copy to keep.

Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your routine treatment, your relationship with those treating you or your relationship with the Lyell McEwin Hospital or University of Adelaide.

6. What are the possible benefits of taking part?

If you do have obstructive sleep apnoea diagnosed on sleep study, there may be a potential benefit of continuous positive airway pressure therapy on your symptoms.

The low dose dobutamine stress echocardiography testing, Tensiomed Arteriograph testing or retinal photography will be of no direct benefit to you personally, but there is a potential benefit of this study for future patients. We hope to discover that there is some link between the heart arteries and the arm and eyes arteries. This may then allow us to assess the arm blood vessels to assess response to newer treatments for the different forms of Coronary Heart Disease in a non-invasive manner.

7. What are the possible risks and disadvantages of taking part?

Dobutamine stress echocardiography:

- Dobutamine stress echocardiography has been a standard functional test performed over the last 20 years.
- The side effects of "dobutamine" includes headache, nausea, vomiting, restlessness, muscle cramps or weakness, chest pain, shortness of breath (feeling puffed), dizziness, palpitations and rash. The risk from this is minimal with the low dose used in this study.

TensioMed Arteriography:

- TensioMed Arteriography is similar to blood pressure taking and is safe with minimal discomfort.

Retinal photography:

- Retinal photography participants will experience a bright flash for 1 second with each photo, but no other side effects are expected.

Sleep Study:

- Type 2 ambulatory (home) sleep study is a standard clinical practice, and carries a small risk that the cream applied may cause temporary skin irritation.

CPAP Therapy:

- CPAP therapy has been a very safe standard clinical practice for patients for over 20 years. Some people initially experience minor symptoms of discomfort associated with the use of CPAP masks and equipment, however these generally resolve after a week or two. Other side effects which may occur with CPAP include dry mouth or nasal passages, skin irritation or rash where the CPAP mask contacts the face, sensation of air pressure through the mask being too high, and in some rare cases, reflux or sensation of abdominal bloating.
- Many people will experience none of these symptoms and very few people will experience them at all. All of these symptoms can be overcome to make CPAP treatment more comfortable

8. Can I have other treatments during this research project?

Whilst you are participating in this research project, we recommend that you continue to take all of the medications or treatments you have been taking for your condition or for other reasons. It is important to tell your study doctor and the study staff about any treatments or medications you may be taking, including over-the-counter medications, vitamins or herbal remedies, acupuncture or other alternative treatments.

9. What if I withdraw from this research project?

If you decide to withdraw from this research project, please notify a member of the research team before you withdraw. If you do withdraw your consent during the research project, the study doctor and relevant study staff will not collect additional personal information from you, although personal information already collected will be retained to ensure that the results of the research project can be measured properly and to comply with law. You should be aware that data collected by the research team up to the time you withdraw will form part of the research project results. If you do not want them to do this, you must tell them when you withdraw from the research project. Withdrawal will not affect your relationship with the clinical staff or the hospital.

Part 2 How is the research project being conducted?

10. What will happen to information about me?

By signing the consent form, you consent to the study doctor and relevant research staff collecting and using personal information about you for the research project. Any information obtained in connection with this research project that can identify you will remain confidential. You will be assigned a unique study ID number which will be linked to your name or medical record number in a separate and securely stored data sheet accessible to the investigator only. Your re-identifiable information will be kept in a password-protected MS EXCEL spreadsheet and only the people directly associated with the study will have access to this re-identifiable information. The information will be kept for a minimum of 15 years as required by law. Your information will only be used for the purpose of this research project and it will only be disclosed with your permission, except as required by law.

Information about you may be obtained from your health records held at this and other health services for the purpose of this research. By signing the consent form, you agree to the research team accessing health records if they are relevant to your participation in this research project.

It is anticipated that the results of this research project will be published and/or presented in a variety of forums. In any publication and/or presentation, information will be provided in such a way that you cannot be identified.

11. Injuries and compensation?

In the unlikely event that you suffer any injuries or complications because of this research project, you should contact the study team as soon as possible and you will be assisted with arranging appropriate medical treatment.

If you are eligible for Medicare, you can receive any medical treatment required to treat the injury or complication, free of charge, as a public patient in any Australian public hospital. Your participation in this research study will not affect any rights you have to compensation under common law.

12. Who is organising the research?

This research project is being jointly conducted by the Lyell McEwin Hospital and the University of Adelaide. No member of the research team will receive a personal financial benefit from your involvement in this research project (other than his or her ordinary wages).

Philips Electronic Australia will be sponsoring a total of 6 months of continuous positive airway pressure therapy for participants with obstructive sleep apnoea, and providing CPAP machine education including troubleshooting.

13. Who has reviewed the research project?

All research in Australia involving humans is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this research project have been approved by the HREC of the TQEH//LMH/MH.

This project will be carried out according to the *National Statement on Ethical Conduct in Human Research (2007)*. This statement has been developed to protect the interests of people who agree to participate in human research studies.

14. Further information and who to contact

The person you may need to contact will depend on the nature of your query as below:

Further Information concerning this project:

Name	Dr Eng Lee Ooi (1st Contact) /Dr Sharmalar Rajendran (2nd Contact)
Position	Study Investigator / Consultant Cardiologist
Telephone	8182 9000 – via switchboard (Monday to Friday – 9am to 4pm)

Any medical problems related to the procedure of study:

Name	On-duty Coronary Care Unit Nursing Staff.
Telephone	8182 9811 – (24 hours)

Any problems related to the Sleep Study or CPAP therapy:

Name	Sleep Study & CPAP therapy Provider
Telephone	Details will be provided by the provider upon receiving device

For matters relating to research at the site at which the participant is participating, the details of the local site complaints person is:

Local Site Complaints contact person:

Name	Alison Barr
Position	NALHN Research Governance Officer
Telephone	8182 9346
Email	healthnalhnrgo@sa.gov.au

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about being a research participant in general, then you may contact:

Reviewing HREC approving this research and HREC Executive Officer details

Review HREC Name	Human Research Ethics Committee (TQEH/LMH/MH)
HREC Executive Officer	Heather O'Dea
Telephone	8222 6841
Email	Health.CALHNResearchEthics@sa.gov.au

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SA Health

THE UNIVERSITY of ADELAIDE

Consent Form - *Adult providing own consent*

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Declaration by Participant

I have read the Participant Information Sheet or someone has read it to me in a language that I understand.

I understand the purposes, procedures and risks of the research described in the participant information sheets.

I have had an opportunity to ask questions and I am satisfied with the answers I have received.

I freely agree to participate in this research project as described and understand that I am free to withdraw at any time during the project without affecting my future health care.

I understand that I will be given a signed copy of this document to keep.

I understand that, if I decide to discontinue the research project treatment, a member of the research team may request my permission to obtain access to my medical records for collection of follow-up information for the purposes of research and analysis.

Name of Participant (please print) _____

Signature _____ Date _____

Name of Witness* to Participant's Signature (please print) _____

Signature _____ Date _____

* Only to be completed when the investigator is not present

* Witness is not to be the investigator, a member of the study team or their delegate. In the event that an interpreter is used, the interpreter may not act as a witness to the consent process. Witness must be 18 years or older.

Declaration by Study Doctor/Senior Researcher†

I have given a verbal explanation of the research project, its procedures and risks and I believe that the participant has understood that explanation.

Name of Study Doctor/ Senior Researcher† (please print) _____

Signature _____ Date _____

† A senior member of the research team must provide the explanation of, and information concerning, the research project.

Note: All parties signing the consent section must date their own signature.