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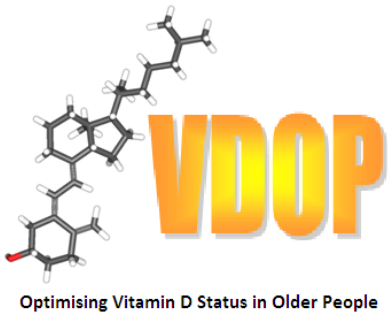

Newcastle University

PATIENT INFORMATION SHEET

Title of project: **Optimising Vitamin D Status in Older People: A Randomised Controlled Trial of Vitamin D Supplementation (VDOP)**

Name of researcher: **Dr Terry Aspray**

You are being invited to take part in a research study. Before you decide whether or not you wish to take part it is important that you understand why the research is being done and what it will involve. Please read this information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear, or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this leaflet.

Please start by reading the study summary. If you think you might be interested in taking part, please go on to read the remainder of this information sheet.

STUDY SUMMARY

The VDOP study is a randomised controlled trial. This means that we put people into groups and give each group a different treatment, to see which treatment option is best. To try to make sure the groups are the same to start with, each patient is put into a group by chance (randomly). Participants in the VDOP trial will be given one of 3 doses of vitamin D as a supplement. The study is 'double blinded'. This means that neither the researchers nor participants know which dose of the study supplement they are having, and helps to prevent bias in the results of the study.

Vitamin D can be made when sunlight hits our skin, but in the UK this only happens during the summer months. Food and supplements also provide a source of

vitamin D. The amount of vitamin D in your body is a balance between the vitamin D from the sun and your diet and that used by the body and stored in fat and muscle. Vitamin D is essential to keep your bones healthy. This study aims to look at the effect of vitamin D supplements on Bone mineral Density in people aged over 70.

Any information collected about you during this study will be kept strictly confidential.

Taking part in this study is entirely voluntary. If you do agree to participate, you are free to withdraw at any time and without having to provide a reason. You will be asked to sign a consent form to confirm that you are willing to take part.

If you are interested in taking part in the study please continue to read the rest of this information sheet.

Part 1 tells you the purpose of this study and what will happen to you if you take part. Part 2 gives you more detailed information about how the study will be carried out.

INFORMATION SHEET PART 1

What is the purpose of the study?

People over the age of 70 slowly lose bone density over time, and vitamin D may help to slow this loss down. In this study, we would like to find out how much vitamin D a person over 70 years of age should take.

Why have I been invited to take part?

You have been invited to take part in this study as you have been identified by your GP as being over the age of 70 and potentially suitable to take part. In total, we would like 375 patients from the Northumberland & Tyne and Wear area to take part in the study.

Do I have to take part?

It is up to you to decide whether or not you would like to take part in this study. You may discuss the study with anyone you wish, including family friends, or healthcare professionals, and ask questions about anything you wish to know about the study. Participation is entirely voluntary, and your medical care will not be affected in any way should you decide not to take part. If you do decide to take

part, then change your mind, you are free to withdraw from the study at any time, and do not have to give a reason.

What will happen to me if I take part?

If you take part in the study, you will be given a vitamin D supplement every month for 1 year. The supplement is in the form of an oil which is taken by mouth. There will be 6 study visits in this time, two at the start, then every 3 months (months 0 (x2 visits), 3, 6, 9, 12) until the last visit at 1 year from baseline, where you will be given the study supplement and have a blood test taken. We will also ask you for a urine sample. You will be asked not to eat anything after 10pm the night before, but we will provide you with breakfast after that. You will also have two Dexa scans.
You will also be asked to complete a falls diary, some questionnaires about your diet and health, quality of life and a sunshine exposure questionnaire throughout the study, which you should take with you to your study appointments. These will be collected by the researchers at each study visit. Further details can be found in part 2.

Which treatments are being used in the study?

The study drug that is being tested is vitamin D. Vitamin D is available as a supplement both from your doctor and over the counter. In this country, there is no recommended dose for vitamin D supplementation.

Participants in this study will receive one of the following treatment options:

Group 1: Oral vitamin D3 – 12,000 IU once monthly which is equivalent to 10 mcg /day

Group 2: Oral vitamin D3 – 24,000 IU once monthly which is equivalent to 20 mcg /day

Group 3: Oral vitamin D3 – 48,000 IU once monthly which is equivalent to 40 mcg /day

The supplement will come as an oil in a small bottle to be taken orally once a month. This is in the form of 10 ml amber glass bottles. You will receive clear verbal and written explanation of how and when to take the study drug.

What are the side effects of any treatment received when taking part?

Vitamin D supplementation, in the doses to be used in this study, is not generally associated with adverse events and side effects. There may be a small increased risk of gastrointestinal side effects such as nausea, vomiting, abdominal cramps and constipation; increased calcium and kidney problems with vitamin D treatment. There is a small risk of minor bruising from the collection of the blood sample but this is minimised since well-trained and experienced staff will take the sample.

What are the possible disadvantages and risks of taking part?

The Dexa scans at the beginning and end of the study will provide exposure to a very small amount of radiation. To put this into context, the radiation dose you will receive is the same as a chest x-ray for example, or a transatlantic jet flight. A Dexa scan is painless and involves you changing into a hospital gown and lying on a special bed whilst a machine scans your hip bones.

What are the possible benefits of taking part?

The study is intended to benefit participants by improving their vitamin D status. In particular, benefits to bone health are anticipated, although we cannot guarantee that you will personally benefit from the vitamin D supplementation. Also, you will be reviewed regularly by medical staff and have blood tests and bone density scans that otherwise would not be done.

What happens when the research study stops?

Once you have completed the 12 months in the study, participants will stop taking the study supplement. We can provide information about vitamin supplements that you can buy over the counter if you are interested.

What if there is a problem?

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. The detailed information on this is given in Part 2.

Will my taking part in this study be kept confidential?

Yes. We will follow ethical and legal practices and all information about you will be handled in confidence. The details are included in Part 2.

This completes Part 1 of the information sheet. If the information in Part 1 has interested you and you are considering participation, please read the additional information in Part 2 before making any decision.

INFORMATION SHEET PART 2

What will happen to me if I take part?

If you decide to take part in the study, you will be given a vitamin D supplement every month for 1 year. The supplement is in the form of an oil which is taken by mouth. There will be 6 study visits in this time, two at the start, then one every 3 months (months 0 (x2 visits), 3, 6, 9, 12) until the last visit at 1 year from baseline. You will be given the study supplement, have a blood test taken and answer some questions see above. In between, you will be asked to take the study supplement at home once every month, and a member of the research team will telephone to remind you to take the supplement. You will also be asked to complete a falls diary, some questionnaires about quality of life and a sunshine exposure questionnaire throughout the study, which you should take with you to your study appointments. These will be collected by the researchers at each study visit. You will also have two Dexa scans, one at baseline and one at visit 6 (final visit). All visits will take place at the Clinical Ageing Research Unit (CARU) in Newcastle.

Visit 1 – screening visit

If you agree to take part in this study, you will be asked to attend CARU. You will be asked not to eat anything from 10pm the night before. A member of the research team will go through the study with you and make sure you understand what the study will involve. Once you are happy that you wish to take part in the study, and any questions you may have had have been answered, you will be asked to sign an informed consent form.

Once you have given informed consent, a blood test will be taken to make sure you are able to take part in the study. This will test your kidney function and calcium levels to make sure it is safe for you to take the study vitamin D supplement. Other baseline tests will also be taken, including height & weight measurements, medical history, blood pressure and you will also be asked to provide a urine sample. After you have had your blood test, you will be given breakfast and a drink. This first visit should take approximately 1 hour. You will be asked to complete a quality of life questionnaire at the study visit. You will also be given a questionnaire about your diet to complete at home and bring with you to your second visit.

Visit 2- baseline visit

If your blood tests result in you being suitable to take part in the study, you will be invited back for a second visit. At this visit you will be asked some questions, by the research nurse which include information about your sunshine exposure. You will have a Dexa scan (a painless scan which looks at the bone density of your hips), be allocated at random into one of the three groups and given details of how to take the study drug. This visit should take approximately 1.5 hours.

You will be given a diary to complete between the 3 monthly visits that collect information about any falls you may have had. Also, a member of the research team will telephone you at home once a month when your next dose of the study supplement is due to remind you to take it and make sure you have been feeling okay.

Visits 3, 4 and 5

At study visits in months 3, 6 & 9, you will be asked to attend CARU in the morning, again not having anything to eat from 10pm the night before. You will be asked to give a blood sample and a urine sample and complete a quality of life, dietary questionnaire and a questionnaire to ask about any sunshine exposure you have had. After you have had your blood test, you will be given breakfast and a drink. Researchers will ask you about your health and any medications you are on (or have changed) since your last study visit. You will be given enough study supplement to last until your next study visits, and will be asked to return any empty supplement bottles. Visits 2, 3 and 4 will last approximately 1 hour.

Visit 6

At month 12 (your final study visit), you will be asked to attend CARU in the morning again not having anything to eat from 10pm the night before. You will be asked to complete the quality of life and diet questionnaires, answer questions about any sunshine exposure and, return your falls diary. You will also be asked to give blood and urine samples and will have a Dexa scan. This scan will be compared directly against the one you had at the beginning of the study to tell us how the density of your bones has changed. After you have had your blood test, you will be given breakfast and a drink. This is the last study visit, and will last approximately 1.5 hours**.**

What will I have to do?

You will need to take the study medication as directed, and on time once per month; and attend CARU for study visits every 3 months. You will also need to complete and return the diaries that will be given to you by researchers. You should **NOT** take any 'over the counter' supplements that contain more than 400 IU (10 mcg) of vitamin D or 500mg of Calcium. Your GP will be made aware (with your consent) of your participation in this study, you do not need to make any change to your lifestyle or your medication unless you are advised otherwise by a medically qualified person.

Travel expenses

Reasonable travel expenses are available, but you will not be paid for participation in this trial. The researchers can arrange for you to claim your expenses. We can

also arrange your travel to and from CARU for you by taxi if you would prefer, please let the study researchers know if you require us to do this. Breakfast and tea/coffee will be provided on study visit days.

Can I find out the results of the research?

We will be happy to discuss the results of the research with you at the end of the study.

Who can I speak to if I want further information?

If you would like to speak to Dr Terry Aspray, the Chief Investigator, or another member of the research team at CARU, their contact details are at the end of these sheets. If you would like to speak to another health professional who is not directly involved in the study, Dr Aspray can arrange this.

What are the alternatives for diagnosis or treatment*?*

The participant group we are looking at in this trial do not require treatment for their vitamin D levels, so there is no alternative treatment for the participants taking part in this study.

What if relevant new information becomes available?

Sometimes we get new information about the treatment being studied. If this happens, your research doctor will tell you and discuss whether you should continue in the study. If you decide not to carry on, your research doctor will make arrangements for your care to continue. If you decide to continue in the study he may ask you to sign an updated consent form. If this happens, your research doctor might consider you should withdraw from the study. He/she will explain the reasons and arrange for your care to continue. If the study is stopped for any other reason, we will tell you and arrange your continuing care.

What will happen if I don't want to carry on with the study?

If you decide to withdraw from the study, with your consent, samples and data obtained may be kept and used to contribute to study results or, with your consent, for future studies. However, should you request your samples and data to be destroyed along with any other information relating to you, we will ensure that this takes place.

You may withdraw from the study treatment, and continue with follow-up, or withdraw from all aspects of the study, without giving a reason.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure by speaking to a member of the PALS (Patient Advice and Liaison Service) team directly during Monday to Friday from 9:00am until 5:00pm. Outside of these hours you can leave a message on an answer-machine and you will be contacted the next working day. The service can be contacted on:

Freephone: 0800 0320202
Text: 01670 511098
Email: northoftynepals@nhct.nhs.uk

or by writing to them at their Freepost address.

Freepost: RLTC-SGHH-EGXJ
North of Tyne PALS
The Old Stables
Grey's Yard
Morpeth
NE61 1QD

In the event that something goes wrong and you are harmed during this research due to someone's negligence, then you may have grounds for a legal action for compensation against The Newcastle upon Tyne Hospitals NHS Foundation Trust, but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will still be available to you (if appropriate). NHS Indemnity does not offer no-fault compensation (i.e. for harm that is not anyone's fault). Neither the sponsor (The Newcastle upon Tyne Hospitals NHS Foundation Trust) who has undertaken to manage the study, nor the management of the hospital/research centre you are attending for your routine treatment, is able to agree in advance to pay compensation for non-negligent harm.

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. If you wish to speak to a member of the research team, please contact Dr Terry Aspray on 0191 2231160, or one of the Research Nurses on 0191 248 1250.

Alternatively, you can find more information on taking part in clinical trials on the following websites:

http://www.nhs.uk/Conditions/Clinical-trials/Pages/Introduction.aspx

http://www.mrc.ac.uk/Achievementsimpact/Clinicaltrials/TakingPartInATrial/index.htm

Private medical insurance

Anyone who has private medical insurance is advised to contact their provider to ensure that participating in this study does not affect their cover.

Will my taking part in the study be kept confidential?

Any information that is collected about you during the course of the research will be kept strictly confidential and The Newcastle upon Tyne Hospitals NHS Foundation Trust will be the custodian of the data. Any information about you that leaves the hospital will have your name and address removed so that you cannot be recognised from it.

We have a standard confidentiality procedure for participants involved in research. This stipulates how personal information is collected, used, stored and disposed of during and following completion of research projects.

Any information that is collected about you during the course of the project will be kept strictly confidential and secure in locked filing cabinets and/or electronic files on computers that have restricted access. Each participant is assigned a unique, study identification code to be used for all data collected during the research. Personal information will not be linked to any data or results.

Contacting your GP

We will ask you to give consent to contact your GP, who will be informed that you are participating in a clinical trial.

What will happen to any samples I give?

The samples being taken will be treated as a 'gift' and you will not benefit financially if this research leads to the development of a new medical treatment or medical test.

Your blood samples will be sent to Cambridge for analysis. All samples will be anonymised prior to leaving Newcastle. Your blood and urine samples will be analysed for markers related to vitamin D metabolism. As part of this study, we would like to ask to be able to extract some genetic material (DNA) from one of your blood samples and store it for use in future bone health research, for analyses of genes related to vitamin D metabolism. These genes are not known to have health implications and the results will not be reported to you or doctor. This would

be voluntary, and you can tell us on the informed consent form if you take part in this study. This would not involve you giving any additional blood samples, and any future research studies will be subject to the relevant regulatory approvals.

What will happen to the results of the research study?

The overall study results may be presented at scientific meetings or published in a scientific journal. You will not be identified in these presentations and publications. We will be happy to discuss the results with you at the end of the study.

Who is organising and funding the research?

This study is funded by a grant from Arthritis Research UK. Study researchers will not be paid anything in addition to their normal salary for working on this study. The Newcastle Clinical Trials Unit is managing the study. The Newcastle upon Tyne Hospitals NHS Foundation Trust is the legal sponsor of the study. This means they are responsible for the conduct of the study.

Who has reviewed the study?

All research in the NHS is looked at by an independent group of people called a Research Ethics Committee to protect your safety, rights, wellbeing and dignity. This study has been reviewed and given favourable opinion by Sunderland Research Ethics Committee.

What should I do now?

If you have any questions about the study, or you think you would like to take part, please contact:

Chief investigator: Dr Terry Aspray - Tel: 0191 223 1160

email: terry.aspray@ncl.ac.uk

VDOP Research Nurse, CARU – Tel 0191 248 1250