Low vs Standard Dose Indocyanine Green in the Identification of Biliary Anatomy Using Near-Infrared Fluorescence Imaging: A Multicenter Randomized Controlled Trial

NCT04942665

4/15/2022

UF | Institutional Review Board
UNIVERSITY of FLORIDA

INFORMED CONSENT FORM
to Participate in Research, and

AUTHORIZATION
to Collect, Use, and Disclose Protected Health Information (PHI)

INTRODUCTION

Name of person seeking your consent:_____

Place of employment & position: _____

GENERAL INFORMATION ABOUT THIS STUDY

1. Name of Participant ("Study Subject")

_____

2. What is the Title of this research study (this "Research Study")?

Low dose ICG for near-infrared fluorescence imaging of biliary tract

3. Whom do you call if you have questions about this Research Study (the "Study Team")?

Principal Investigator: Ali Zarrinpar, Office: 352-594-5170
Co-investigator: Tyler Loftus, Office: 352-265-0535
Other research staff: Curtis Warren, Office: 352-594-4111

4. Who is paying for this Research Study?

The sponsor of this study is University of Florida, Department of Surgery and The Society of University Surgeons.

5. In general, what do you need to know about this Research Study?

Agreeing to become involved in any research is always voluntary. By signing this form, you are not waiving any of your legal rights. If you decide not to participate in this research, you will not be penalized in any way and you will not lose any benefits to which you are entitled. If you have questions about your rights as a research subject, please call the University of Florida Institutional Review Board (IRB) office at (352) 273-9600.

a) In general, what is the purpose of the research, how long will you be involved?

The purpose of this study is to see how different doses of an imaging dye (indocyanine green, ICG) can help us see the anatomy of your liver and bile ducts better in the operating room during surgery. You will be involved in this study for no longer than two weeks.

b) What is involved with your participation, and what are the procedures to be followed in the research?

At this time, 2.5 mg of a medical dye called indocyanine green (ICG) is given to patients in a vein before surgery so that we can see the bile duct anatomy. We use a special camera and light system called PINPOINT in the operating room to see the fluorescence. We would like to test whether a dose that is 50 times less (0.05 mg) is even better and quicker at allowing us to do this with equal (or better) effectiveness. This should not add any more time to the operation.

You will be assigned by chance to receive either the standard dose (2.5 mg) or the lower dose (0.05 mg) by blindly drawing an envelope from a box.

ICG is an FDA approved fluorescent dye, which has been used to measure liver function for over 60 years. PINPOINT is an FDA cleared device for laparoscopic operations.

We will keep a coded record of relevant medical data such as labs and other testing results including labs, scans, and liver biopsy results, if these tests are performed as part of your standard treatment. For the purposes of the study, we will record a brief video of the important parts of the operation so that we can make some calculations about the quality of the images afterwards. There will be no identifiable information in that video; only your insides will be visible.

A description of this clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

c) What are the likely risks or discomforts to you?

It is possible that the lower dose of ICG will not be as good as the higher dose. We will minimize the risk of this by still using other technology that we usually use in the operating room, such as ultrasound or x-ray.

Injecting ICG through an IV may cause leaking of fluid out of the vein, swelling, discomfort, burning, or skin tightness. IVs are routinely used by clinicians and they are considered to be low risk. ICG, like any other drug, can also cause an allergic reaction. Although ICG is considered to be a safe drug with an estimated allergic reaction rate of 5 in every 1000 patients, it has been reported that people with history of shellfish and iodine allergy could be sensitive to ICG dye. To avoid this this risk, you will not be able to participate in this study if you have history of shellfish and/or iodine allergy.

d) What are the likely benefits to you or to others from the research?

There will likely not be any direct benefit to you, but being able to use a lower dose may improve the ability to see anatomy better during surgery and lower the risk of side effects.

e) What are the appropriate alternative procedures or courses of treatment, if any, that might be helpful to you?

You may choose not to participate in the research study. Deciding to not participate will not affect your care. The standard visualization techniques will be used as part of your regular care.

Additional and more detailed information is provided within the remainder of this Informed Consent form, please read before deciding if you wish to participate in this study

A description of this clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

WHAT CAN YOU EXPECT IF YOU PARTICIPATE IN THIS STUDY?

6. What will be done as part of your normal clinical care (even if you did not participate in this Research Study)?

As part of your normal clinical care, you will receive various assessments and tests before your surgery (also known as pre-operative care). After your surgery, similar tests and assessments known as post-operative care will be provided. These include blood tests, scans, and liver biopsies, as determined by your care team.

7. What will be done only because you are in this Research Study?

If you decide to take part in this study, you will be randomly assigned (much like the flip of a coin) to receive either the standard 2.5 mg injection of a medical dye called indocyanine green (ICG) or low dose (0.05 mg). Your assigned dose will be chosen by blindly drawing an envelope from a box. The ICG will be given into a vein (IV) before your operation. We will then proceed with your surgery as standard. The visualization of your anatomy will be graded and recorded. These measurements will be used to understand whether the lower dose is better, just as good, or worse than the standard dose. If available, medical information such as the results from your surgery, labs, imaging, liver biopsy, and other relevant data from your medical record will be collected.

Once this research study is completed, any information that could identify you **might** be removed from any identifiable private information collected and that, after such removal, the information could be used for future research studies or distributed to another investigator for future research studies without additional informed consent

from you or your legally authorized representative. At the end of the study, the videos will also have any identifying information removed and maintained for possible future research. To the best of their ability, study team will protect the identity of research participants by assigning a unique study code to each patient after the removing identifiers and saving study data in a secure UF server designated for research.

If you have any questions now or at any time during this Research Study, please contact one of the Research Team members listed in question 3 of this form.

8. What identifiable health information will be collected about you and how will it be used?

The Research Team will collect your name, sex/gender, date of birth, procedure dates, medical history, result of blood tests, and liver biopsies, if they are available. These will be used to understand how those factors may affect the images during the operation and whether knowing more detail about your condition could possibly improve the care provided to you.

The Research Team may collect this information from other healthcare providers, such as laboratories, which are a part of this research, as well as healthcare providers that are not part of this research (other doctors, hospitals or clinics). Other professionals at the University of Florida or Shands Hospital who provide study-related care, and the University of Florida Institutional Review Board (IRB), may also collect your health information.

The Research Team listed in question 3 above will use or share your health information as described below to carry out this research study.

9. With whom will this health information be shared?

This health information <u>may</u> be shared with:

- the study sponsor (listed in Question 4 of this form);
- United States governmental agencies which are responsible for overseeing research, such as the Food and Drug Administration, the Department of Health and Human Services, and the Office of Human Research Protections;
- Government agencies which are responsible for overseeing public health concerns such as the Centers for Disease Control and federal, state and local health departments.
- The IRB that reviewed this Research Study and ensures your rights as a Study Subject are protected

Otherwise, your identifiable health information will not be shared without your permission unless required by law or a court order. Once your health information is shared with those listed above, it is possible that they could share it without your permission because it would no longer be protected by the federal privacy law.

10. How long will you be in this Research Study?

You will be involved in this study for no longer than two weeks.

This Authorization to use and share your health information expires at the end of the study, unless you revoke it (take it back) sooner.

11. How many people are expected to take part in this Research Study?

35 people are expected to participate in this study.

WHAT ARE THE RISKS AND BENEFITS OF THIS STUDY AND WHAT ARE YOUR OPTIONS?

12. What are the possible discomforts and risks from taking part in this Research Study?

It is possible that the lower dose of ICG will not be as good as the higher dose. We will minimize the risk of this poorer visualization by continuing to incorporate other methods of visualization that we routinely use in the operating room, such as ultrasound or x-ray.

Risks associated with indocyanine green (ICG) dye administered through an IV would be present even if you were not taking part in this research study. Most commonly reported adverse reactions to indocyanine green (ICG) dye are typically mild allergic reactions, sweating, headache, or itching. Less commonly reported events include anaphylactic reactions, such as low blood pressure, swelling of mouth, tongue, throat, or difficulty breathing. Although ICG is considered to be a safe drug with an estimated allergic reaction rate of 5 in every 1000 patients, it's been reported that people with history of shellfish and/or iodine allergy could be sensitive to ICG dye. To avoid this this risk, you will not be able to participate in this study if you have history of shellfish and/or iodine allergy.

Administering ICG through an IV may cause collapse of the vein, having the medication get into the tissues, swelling, discomfort, burning or tightness in the hand or arm. The most commonly reported adverse reactions indocyanine green dye are typically mild and included pruritus, shortness of breath, and nausea. Less commonly reported events include bronchospasm (a condition wherein muscles lining the airways of the lungs constrict or tighten, reducing airflow), laryngospasm (a spasm of the vocal cords that temporarily makes it difficult to speak or breath), low blood pressure, and cardiac arrest. IVs are routinely used by clinicians and they are considered to be low risk.

This Research Study may also include risks that are unknown at this time.

Please note, participating in more than one research study or project may further increase the risks to you. If you are already enrolled in a research study, please inform one of the Research Team members listed in question 3 of this form or the

person reviewing this consent with you before enrolling in this or any other research study or project.

During the study, the Research Team will notify you of new information that may become available and might affect your decision to remain in the study.

The University of Florida is required by law to protect your health information. Your health information will be stored in locked filing cabinets or on computer servers with secure passwords, or encrypted electronic storage devices, as required by University policy. However, there is a slight risk that information about you could be released inappropriately or accidentally. Depending on the type of information, a release could upset or embarrass you, or possibly affect your ability to get insurance or a job.

If you wish to discuss the information above or any discomforts you may experience, please ask questions now or call one of the Research Team members listed in question 3 in this form.

13a. What are the potential benefits to you for taking part in this Research Study?

There will likely not be any direct benefit to you, but being able to use a lower dose may improve the ability to see anatomy better during surgery and lower the risk of side effects.

13b. How could others possibly benefit from this Research Study?

A lower dose of ICG before surgery may lead to better images during surgery for future patients and lower the risk of side effects.

13c. How could the Research Team members benefit from this Research Study?

In general, presenting research results helps the career of a researcher. Therefore, the Research Team listed in question 3 of this form may benefit if the results of this Research Study are presented at scientific meetings or in scientific journals.

13d. Will you be allowed to see the research information collected about you for this Research Study?

You may not be allowed to see the research information collected about you for this Research Study, including the research information in your medical record, until after the study is completed. When this Research Study is over, you will be allowed to see any research information collected and placed in your medical record.

14. What other choices do you have if you do not want to be in this study?

Your participation in this study is voluntary; you may withdraw from the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. For evaluation and reporting purposes, researchers may ask for your reasons for withdrawal.

You may also refuse to authorize the use of your health information, but if you refuse, you may not be allowed to be in this research study or receive any research-related treatment that is only available in this research study. However, your decision not to sign this Authorization will not affect any other treatment you may be eligible to receive.

15a. Can you withdraw from this study?

You may withdraw your consent and stop participating in this Research Study at any time. If you do withdraw your consent, there will be no penalty to you, and you will not lose any benefits to which you are otherwise entitled.

If you decide to withdraw your consent to participate in this Research Study for any reason, please contact the Research Team listed in question 3 of this form. They will tell you how to safely stop your participation.

You can also change your mind and take back this Authorization at any time by sending a written notice to the Research Team listed in question 3 of this form to let them know your decision. If you take back this Authorization, the Research Team may only use and disclose your health information already collected for this research study. No additional health information about you will be collected or disclosed to the Research Team. However, if you take back this Authorization, you may not be able to continue in this study. Please discuss this with a member of the Research Team listed in question #3.

15b. Can the Principal Investigator withdraw you from this Research Study?

You may be withdrawn from this Research Study without your consent for the following reasons:

- If the study doctors fear that study procedures could cause you harm.

WHAT ARE THE FINANCIAL ISSUES IF YOU PARTICIPATE?

16. If you choose to take part in this Research Study, will it cost you anything?

No. There will be no extra cost to you for participating in this Research Study.

17. Will you be paid for taking part in this Research Study?

No.

18. What if you are injured while in this Research Study?

If you are injured as a direct result of your participation in this study, only the professional services that you receive from any University of Florida Health Science Center healthcare provider will be provided without charge. These healthcare providers include physicians, physician assistants, nurse practitioners, dentists or psychologists. Any other expenses, including Shands hospital expenses, will be billed to you or your insurance provider.

You will be responsible for any deductible, co-insurance, or co-payments. Some insurance companies may not cover costs associated with research studies or research-related injuries. Please contact your insurance company for additional information.

The Principal Investigator will determine whether your injury is related to your participation in this study.

No additional compensation is routinely offered. The Principal Investigator and others involved in this study may be University of Florida employees. As employees of the University, they are protected under state law, which limits financial recovery for negligence.

Please contact the Principal Investigator listed in question 3 of this form if you experience an injury or have questions about any discomforts that you experience while participating in this study.

SIGNATURES

As an investigator or the investigator's representative, I have explained to the participant the purpose, the procedures, the possible benefits, and the risks of this Research Study; the alternative to being in the study; and how the participant's protected health information will be collected, used, and shared with others:

Signature of Person Obtaining Consent and Authorization	Date

You have been informed about this study's purpose, procedures, possible benefits, and risks; the alternatives to being in the study; and how your protected health information will be collected, used and shared with others. You have received a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask questions at any time.

You voluntarily agree to participate in this study. You hereby authorize the collection, use and sharing of your protected health information as described above. By signing this form, you are not waiving any of your legal rights.

Signature of Person Consenting and Authorizing	Date

Consent to be Photographed, Video and/or Audio Recorded

With your permission, you will have the following done during this research (check all that apply):

☐ photographed ☐ video recorded ☐ audio recorded

Your name or personal information will not be identified on the photograph(s), video or audio recordings, and confidentiality will be strictly maintained. However, when these photograph(s), video and/ or audio recordings are shown or heard, others may be able to identify you.

The Principal Investigator (PI) of this study, _____, or *[his/her]* successor, will keep the photograph(s), video and/or audio recordings in a locked cabinet, in a folder on a password protected computer server drive, or as an encrypted electronic file. These photograph(s), video and/or audio recordings will be shown under *[his/her]* direction to students, researchers, doctors, or other professionals and persons. Please indicate under what conditions Dr. _____ has your permission to use the photograph(s), video and/or audio recordings, and sign and date below.

☐ The following will be **destroyed once the study is closed** (initial next to all that apply):

____ photograph(s) _____ video recording(s) _____ audio recording(s)

☐ As described in the Informed Consent Form, and for the purposes of **education at the University of Florida Health Science Center**. The PI may keep the following for an indefinite period of time in a locked file, in a password protected computer server drive, or as an encrypted electronic file (initial next to all that apply):

____ photograph(s) _____ video recording(s) _____ audio recording(s)

☐ As described in the Informed Consent Form; for the purposes of **education at the University of Florida Health Science Center; and for presentations at scientific meetings outside the University**. The PI may keep the following for an indefinite period of time in a locked file, in a password protected computer server drive, or as an encrypted electronic file (initial next to all that apply):

____ photograph(s) _____ video recording(s) _____ audio recording(s)

_____ _____

Signature Date