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UNIVERSITY HOSPITALS CLEVELAND MEDICAL CENTER
CONSENT FOR INVESTIGATIONAL STUDIES
(v. 12.2018)

Project Title: Oral Ketorolac as an Adjuvant Agent for Postoperative Pain Control following Arthroscopic Meniscus Surgery

Principal Investigator: Michael R. Karns, M.D.

Key Information: The following is a short summary of this study to help you decide whether or not to be a part of this study. More detailed information is listed later on in this form.

Why am I being invited to take part in a research study?
You are being asked to participate in this research study because you have a tear in your meniscus (C-shaped pieces of cartilage that act as shock absorbers in the knee between your thigh bone and shin bone) and are scheduled to have surgery to fix it. This research study is looking to potentially find new ways to improve pain control for patients who are having surgery to repair meniscus tears.

Things I should know about a research study
- Someone will explain this research study to you.
- Whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- You can ask all the questions you want before you decide.

Introduction/Purpose
You are being asked to participate in a research study because you have damage to your meniscus and are scheduled to have a surgery to fix it. Arthroscopic surgery is a minimally invasive type of surgery that uses a small scope in your knee joint. Patients who have this type of surgery often have pain in their knee, especially during the days following surgery. The goal of this research study is to see if adding another drug, called Ketorolac (Trade name: Toradol), to the normal pain medicine you receive after surgery will help reduce the knee pain. Ketorolac is a non-steroid anti-inflammatory drug (NSAID) which means it can help relieve pain and reduce inflammation in the body. This drug is approved for short-term treatment of pain in adults. We will tell if this drug is effective by looking at your pain medication use and your pain levels during the days following surgery. You will be one of 43 people enrolled in this study here at University Hospitals.

Participating in research is voluntary, which means the choice is up to you. Choosing not to participate will have no effect on the medical care that you receive. This form, called a consent form, explains everything that will happen to you if you decide to participate. Please read it carefully and have all of your questions answered before you make your decision. If you decide to participate, we will have you sign this consent form. You will be given a copy of this form to keep.

Key Study Procedures

Your participation in this study will last for about 2 months after your surgery. You will be assigned to a study group by chance using a process similar to the flip of a coin before you have your surgery. This process is called randomization. The first group (Group 1) will receive the standard pain medication before, during, and after surgery for arthroscopic meniscus surgery. The second group (Group 2) will receive the standard pain medication before, during, and after surgery but will also receive Ketorolac during surgery through the IV in the arm and will be given a Ketorolac prescription to take after leaving the hospital.

No matter what group you are in, you will fill out a pain diary at home for the first five days after surgery. You will fill out questionnaires that ask about your pain and function levels before surgery and at your first and second appointments after surgery. You will receive two phone calls from a member of the study team after surgery.

More detailed information about the study procedures can be found under "Detailed Study Procedures."

Key Risks

There is a risk of breach of confidentiality for all patients in the study, which means that someone who is not listed in this form might view your data either by accident or from malicious actions they take to hack the data. We are protecting against this by only storing information that can be directly linked to you on UH computers, in password protected files which are behind firewalls.

If you are randomized to the group that receives Ketorolac (Group 2), there is a risk of you experiencing common side effects from the medication, which include, but are not limited to headache, dizziness, nausea, and drowsiness. Since Ketorolac is an NSAID, it can cause stomach ulcers or bleeding, kidney failure, allergic reactions, and increased risk for a heart attack or stroke. We will be closely monitoring you for symptoms of these side effects. Patients in Group 2 will also receive Omeprazole to prevent stomach pain and decrease risk of stomach ulcers. There is a risk of experiencing common side effects from Omeprazole, which include, but are not limited to headache, vomiting, diarrhea, stomach pain, constipation, and fatigue.

More detailed information about the risks of this study can be found under "Detailed Risks."

Benefits

There may be no direct benefit to you by your participation in this research. However, your participation in this study may help us learn new information that can help improve how we care for our surgery patients in the future.

Alternatives to Study Participation

Because of the nature of this study, the only alternative is to not participate in this study. You may choose not to participate in this study, and to have your surgery as planned. Your pain will be controlled using the normal, standard methods described to you by your doctor. If you decide to participate, you can change your mind at any time and stop participating. You just have to let us know.

Detailed Information: The following is more detailed information about this study in addition to the information listed above.

Detailed Study Procedures

During your standard pre-operative clinic visit, you will fill out standard questionnaires that ask about your pain and function level. These questionnaires should only take you 5 to 10 minutes to complete.

If you are randomized to Group 1, you will receive all of the standard pain medication before, during, and after surgery. This includes Oxycodone-Acetaminophen 5-325 (Percocet) pills to be taken every 4-6 hours by mouth as needed for moderate to severe pain after leaving the hospital. Patients in Group 1 will not receive Ketorolac or Omeprazole.

If you are randomized to Group 2, you will receive a dose of IV Ketorolac at the end of your surgery, and will be given Ketorolac pills to be taken by mouth every six hours for three days after leaving the hospital. We recommend that Ketorolac be taken with food or with an antacid to avoid stomach upset. In addition, you will be prescribed Omeprazole to be taken by mouth for to reduce your risk of developing peptic ulcer disease. The Omeprazole must be taken once daily for a total of three days. We also recommend that Omeprazole be taken with food. You will also be given two informative handouts on taking Ketorolac and its side effects. If randomized into Group 2, your insurance company will be responsible for the cost of the IV Ketorolac you receive during surgery, as well as the Ketorolac pills and Omeprazole pills.. If your insurance company does not cover the cost of the Ketorolac and Omeprazole, you will be responsible for the cost. In addition, you will be given prescriptions for Ketorolac and Omeprazole before leaving the hospital. It is your responsibility to fill these medications following discharge at a pharmacy of your choice.

After your surgery, you will have your follow up care just as you would if you did not participate in the study. This includes instructions on when to start physical therapy to help strengthen your knee after surgery. As part of this research study, we will give you a diary and ask you to write down how much pain you are having and how much pain medicine you need to take during the morning, afternoon, and evening. At the end of the day you will write down if you have any side effects from the medicine like nausea, vomiting, drowsiness, or headaches. You will be asked to update this diary three times per day (morning, afternoon, and evening), every day for 5 days. Writing in this diary should only take 3 to 5 minutes to complete and can be done whenever you have time. At you first follow-up appointment in clinic, most likely 7-14 days after your surgery, you will fill out questionnaires that will ask you about your pain and functional levels after surgery. You will fill out these same questionnaires at your second follow-up appointment in clinic at about 6 to 8 weeks after surgery. During both clinic visits, filling out these questionnaires should only take you 5 to 10 minutes to complete.

You will receive two phone calls from a member of the study team after your surgery. The first phone call will be on the second day after surgery to make sure you have not had any problems with filling out your diary and to answer any questions you may have about the study. If you are in the group that received Ketorolac (Group 2), you will also be asked if you have experienced any side effects from taking Ketorolac. You will receive the second phone call approximately 1 month from your surgery, and you will be asked how many refills you have had for your pain medicine prescription (Oxcodone-Acetaminophen 5-325) and if you have any remaining questions about the study.

Detailed Risks

There is a risk that you may experience some side effects from Ketorolac such as: headache, dizziness, nausea, and drowsiness. Since Ketorolac is an NSAID, it can cause stomach ulcers or bleeding, kidney failure, allergic reactions, and increased risk for a heart attack or stroke. We will be closely monitoring you for symptoms of these side effects. There are no known risks or reported drug interactions for Ketorolac with the standard of care pain medicine used for arthroscopic rotator cuff surgery at University Hospitals.

If you feel your pain is not adequately controlled after leaving the hospital, please call your surgeon's office. These are standard instructions for all patients who receive rotator cuff surgery at University Hospitals.

There is a risk that you may experience side effects while taking Omeprazole such as: headache, vomiting, diarrhea, stomach pain, constipation, and fatigue. There is also the risk of developing

an allergic reaction or symptoms of liver damage (yellow skin, dark urine, fatigue), but these are extremely rare.

There is a risk that the drugs provided in this study may interact with the medications you take at home. Your home medications will be reviewed by your surgeon or study investigator and screened for any potential drug-drug interactions.

There is a risk of breach of confidentiality which means that someone who is not listed in this form might view your data either by accident or from malicious actions they take to hack the data. We are protecting against this by only storing information that can be directly linked to you on UH computers, in password protected files which are behind firewalls.

Financial Information

You will not be paid for your participation in this study. The surgery you will have is not a part of this research, and you or your insurance company will be responsible for the costs of your surgery. If you are randomized into Group 1, which receives the same pain medications as patients who are not enrolled in the study, there is no additional cost to you or your insurance company for participating in the study. Patients randomized into Group 2 will receive IV Ketorolac during their surgery and Ketorolac pills in addition to the standard pain medications after surgery. Patients in Group 2 will also receive a prescription for Omeprazole. If you are randomized into Group 2, you or your insurance company will be responsible for the cost of the Ketorolac medication, Omeprazole medication, and for any associated co-pay.

Notice for Managed Care (Medicare Advantage Plan) Beneficiaries

Certain services provided to you as a participant in a clinical trial are allowable to be billed to, and paid by, your medical insurance. These services are referred to as “covered” clinical trial services. If you have a Medicare Advantage Plan as part of your medical insurance, the Centers for Medicare & Medicaid Services (CMS) require that traditional Medicare will be billed for those services. When this occurs, you will remain responsible for paying the coinsurance and deductibles according your Medicare Advantage Plan. Your Medicare Advantage Plan should cover any associated cost share related to Medicare. Please speak with a financial counselor to understand what the specific financial impact will be for you associated with participating in this clinical trial.

Research-Related Injury

If injury occurs as a result of your involvement in this research, medical treatment is available from University Hospitals or another medical facility but you/your medical insurance will be responsible for the cost of this treatment. A research injury is an injury that happens as a result of taking part in this research study. If you are injured by a medical treatment or procedure that you

would have received even if you weren't in the study, that is not considered a "research injury". There are no plans for payment of medical expenses or other payments, including lost wages, for any research related injury. To help avoid injury, it is very important to follow all study directions.

Student/Employee Rights

Choosing not to participate or withdrawing from this study will not affect your employment or class standing, nor the will results be shared with your supervisor.

Confidentiality

All of the information we collect about you will be kept confidential. You will be assigned a unique study number and this number will be used to identify your data. Information that identifies you will only be accessed by members of the study team, and will be kept secure on protected University Hospitals computers or on a password encoded flash drive. Your information or samples that are collected as part of this research will not be used or distributed for future research studies, even if all of your identifiers are removed.

Privacy of Protected Health Information

The Health Insurance Portability & Accountability Act (HIPAA) is a Federal law that helps to protect the privacy of your health information and to whom this information may be shared within and outside of University Hospitals. This Authorization form is specifically for a research study entitled "Oral Ketorolac as an Adjuvant Agent for Postoperative Pain Control following Arthroscopic Meniscus Surgery" and will tell you what health information (called Protected Health Information or PHI) will be collected for this research study, who will see your PHI and in what ways they can use the information. In order for the Principal Investigator, Michael Karns, MD and the research study staff to collect and use your PHI, you must sign this authorization form. You will receive a copy of this signed Authorization for your records. If you do not sign this form, you may not join this study. Your decision to allow the use and disclosure of your PHI is voluntary and will have no impact on your treatment at University Hospitals. By signing this form, you are allowing the researchers for this study to use and disclose your PHI in the manner described below.

Generally the Principal Investigator and study staff at University Hospitals and Case Western Reserve University who are working on this research project will know that you are in a research study and will see and use your PHI. The researchers working on this study will collect the following PHI about you: your name, medical record number, your age, underlying medical diagnoses, height, weight and subjective pain tolerance. This PHI will be used to assess multiple

outcome variables as they relate to pain in the knee after surgery. Your access to your PHI may be limited during the study to protect the study results.

Your PHI may also be shared with the following groups/persons associated with this research study or involved in the review of research: co-investigators, other staff from the Principal Investigator's medical practice group; University Hospitals, including the Center for Clinical Research and the Law Department; Government representatives or Federal agencies, when required by law.

Your permission to use and disclose your PHI does not expire. However, you have the right to change your mind at any time and revoke your authorization. If you revoke your authorization, the researchers will continue to use the information that they previously collected, but they will not collect any additional information. Also, if you revoke your authorization you may no longer be able to participate in the research study. To revoke your permission, you must do so in writing by sending a letter to: Michael Karns MD, Hanna House 6th Floor Department of Orthopaedic Surgery, 11100 Euclid Ave, Cleveland, Ohio 44106. If you have a complaint or concerns about the privacy of your health information, you may also write to the UH Privacy Officer, Management Service Center, 3605 Warrensville Center, MSC 9105, Shaker Heights, OH 44122 or to the Federal Department of Health and Human Services (DHHS) at DHHS Regional Manager, Office of Civil Rights, US Department of Health and Human Services Government Center, JF Kennedy Federal Building, Room 1875, Boston, MA 02203. Complaints should be sent within 180 days of finding out about the problem.

The researchers and staff agree to protect your health information by using and disclosing it only as permitted by you in this Authorization and as directed by state and Federal law. University Hospitals is committed to protecting your confidentiality. Please understand that once your PHI has been disclosed to anyone outside of University Hospitals, there is a risk that your PHI may no longer be protected; however other Federal and State laws may provide continued protection of your information.

Summary of your rights as a participant in a research study

Your participation in this research study is voluntary. Refusing to participate will not alter your usual health care or involve any penalty or loss of benefits to which you are otherwise entitled. If you decide to join the study, you may withdraw at any time and for any reason without penalty or loss of benefits. If information generated from this study is published or presented, your identity will not be revealed. In the event new information becomes available that may affect the risks or benefits associated with this study or your willingness to participate in it, you will be notified so that you can decide whether or not to continue participating. If you experience

physical injury or illness as a result of participating in this research study, medical care is available at University Hospitals Cleveland Medical Center (UHCMC) or elsewhere; however, UHCMC has no plans to provide free care or compensation for lost wages.

Disclosure of your study records

Efforts will be made to keep the personal information in your research record private and confidential, but absolute confidentiality cannot be guaranteed. The University Hospitals Cleveland Medical Center Institutional Review Board may review your study records. If this study is regulated by the Food and Drug Administration (FDA), there is a possibility that the FDA might inspect your records. In addition, for treatment studies, the study sponsor and possibly foreign regulatory agencies may also review your records. If your records are reviewed your identity could become known.

Contact information

_____ has described to you what is going to be done, the risks, hazards, and benefits involved. The Principal Investigator, Michael Karns, MD, can also be contacted at 216-844-0209. If you have any questions, concerns or complaints about the study in the future, you may also contact them later.

If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about; concerns regarding the study; research participant's rights; research- related injury; or other human subject issues, please call the University Hospitals Cleveland Medical Center's Research Subject Rights phone line at (216) 983-5633 or write to: The Associate Chief Scientific Officer, The Center for Clinical Research, University Hospitals Cleveland Medical Center, 11100 Euclid Avenue, Lakeside 1400, Cleveland, Ohio, 44106-7061.

Signature

Signing below indicates that you have been informed about the research study in which you voluntarily agree to participate; that you have asked any questions about the study that you may have; and that the information given to you has permitted you to make a fully informed and free decision about your participation in the study. By signing this consent form, you do not waive any legal rights, and the investigator(s) or sponsor(s) are not relieved of any liability they may have. A copy of this consent form will be provided to you.

x	
Signature of Participant	Date

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Principal Investigator: Michael R. Karns, M.D.

x	
Printed Name of Participant	

x	
Signature of person obtaining informed consent	Date
x	
Printed name of person obtaining informed consent	