Coumadin® Education Class

Anticoagulation Clinic

Please turn cell phones off. Thank you!
The History of Coumadin®

1920s: cattle deaths due to anti-clotting agent found in clover

Mid-1940s: used as rat poison

1948: agent refined for human use

1950s: warfarin used in heart attack & stroke victims

1935: compound tested in humans
What is Coumadin®?

- You may hear your Healthcare Provider (e.g., doctor, pharmacist or nurse) call Coumadin® an “anticoagulant”
- “Anti” means “against”
- “Coagulant” refers to blood clotting
How does Coumadin® work?

- Coumadin® helps stop harmful blood clots from forming
- Blood clots form when blood cells stick together
- Coumadin decreases the “stickiness” of your blood
What does Coumadin® NOT do?

- Does not “thin” your blood
- Does not change the volume of your blood
- Does not add water to your blood
Why are you taking Coumadin®?

- Atrial Fibrillation (irregular heart beat)
- Deep Vein Thrombosis (leg clot) / Pulmonary Embolism (lung clot)
- Valvular Heart Disease
- Others
Where can blood clots form?

- Lung
- Brain
- Heart
- Legs
Atrial Fibrillation

- Affects > 2 million people
- A rapid or irregular heart beat
- Blood pools in atria
- May form a blood clot and lead to a stroke

Normal heart beating
Transient Ischemic Attack (TIA)

- Occurs when blood supply to part of the brain is briefly interrupted
- Symptoms are similar to a stroke, but do not last as long
- TIAs are a serious warning that a stroke may happen in the near future
Stroke as a result of A Fib

Signs and Symptoms

- Loss of sensation on one side of the body
  - Numbness, pins and needles, or clumsiness
- Impaired vision
- Unable to speak clearly
- Confusion
Deep Vein Thrombosis (DVT) is a blood clot in a large vein of the legs or groin. This condition may become life threatening if not treated. Signs and symptoms of a DVT can include:

- Pain
- Leg swelling
- Warmth and redness
Pulmonary Embolism (PE)

- If the clot breaks free it may become lodged in the lungs causing a PE
- May have trouble breathing, experience rapid breathing, and have chest or back pain when inhaling
- Finger tips and lips may appear blue
- This can be life threatening
About the Anticoagulation Clinic

- Opened October 2000
- Created by a clinical pharmacist
- Simplify your Coumadin® monitoring
  - Faster
  - Easier
  - Less Painful

No more vials of blood!
CoaguChek XS Monitor

Advantages:
- Less blood
- Finger stick rather than arm draw
- Immediate results within 1-2 minutes
- FDA approved

http://www.automesure.com/library/achats/CoaguChek_XS.jpg
Understanding Your Blood Test

- Your blood test result is a number called an International Normalized Ratio (INR)
- INR revolutionized Coumadin® monitoring by standardizing the results and made Coumadin much safer
- The Anticoagulation Clinic uses your INR results to establish your personal dosage of Coumadin®
What should my goal INR range be?

- INR for someone not taking Coumadin = 1.0
- Sample INR ranges (most common)
  - 2.0 - 3.0
  - 2.5 – 3.5
How much Coumadin® should you take?

- Every patient is different; your dose is the right amount for your personal needs
- One of the few medications that is dosed specially for each patient
- Small changes in dose can make a big difference
  - Not enough drug = Risk of blood clot
  - Too much drug = Risk of bleeding
What things may change your Blood Test?

Tell the Anticoagulation Clinic about changes in any of these things:

- Illness
- Diet
- Alcohol
- Travel
- Other medications - prescriptions and over-the-counter
- Nutritional and herbal supplements, vitamins
What to do if I am sick

- Call if you have been admitted to the hospital, seen in the **Emergency Room, a Same Day Care Clinic**, or urgent care
- Changes to your health status can affect your INR (diarrhea, constipation, etc)
- Please let the Coumadin Clinic know when you begin any antibiotic.
  - Z-pak (azithromycin)
  - Cipro (ciprofloxacin); Levaquin (levofloxacin)
  - Flagyl (metronidazole); Bactrim (TMP/SMX)
When I travel:

- Traveling may affect your INR results
- Always inform the Coumadin Clinic of your travel plans two weeks in advance
- Establish with a healthcare provider if away for >3 months
How does my diet play a role?
Vitamin K

- Vitamin K helps the body form clots
- **Changing the amount of Vitamin K you eat may change the amount of Coumadin® you should be taking**
- Foods high in Vitamin K include dark, green leafy vegetables such as:
  - Cabbage
  - Romaine Lettuce
  - Broccoli
  - Spinach
  - Brussels Sprouts
What type of lettuce do you eat?

- **Iceberg lettuce** consists mainly of water
- **Romaine lettuce** contains a high amount of **vitamin K**
- If you don’t know, ask
- Be consistent
Should I avoid foods with a lot of Vitamin K?

NO!

- These foods are important to a healthy diet
- The important thing is to keep your intake of Vitamin K consistent

Eat the same number of servings of Vitamin K foods every week
Why should I keep a consistent diet?
Fruit interactions

- **Avoid Grapefruit & Cranberry juice**
  - These juices prevent the breakdown of Coumadin in the liver
  - ↑ Coumadin’s effect and ↑ INR
  - **Separating Coumadin and these juices won’t change the interaction**
Can I have my cocktail?

- It is safest to avoid alcohol
- Inconsistent alcohol intake $\uparrow$ INR
- Chronic daily alcohol use can have unsafe effects on INR
What about over-the-counter medications?
Many Over The Counter medications may also interact with Coumadin

- **Pain medications:**
  - Aspirin, Ibuprofen, and Aleve as well as products like Pepto-Bismol®

- **Tylenol (acetaminophen) is safest to take**
  - Avoid moderate or high doses of Tylenol (anything more than four 500mg tablets in a day) and long term, regular use (every day for more than 1 week)

- **Caution with liver problems**
Many Over The Counter medications may also interact with Coumadin

- High amounts Vitamin C and Vitamin E
- Herbal Products: Ginkgo, Ginseng, Garlic
- Nutritional Supplements
  - Ensure®
  - Boost®
Many Over The Counter medications may also interact with Coumadin

- High fiber products can decrease the effect of Coumadin
  - Metamucil
  - Benefiber
  - Fiberlax
- Coumadin dose should be separated from fiber products by at least **4 hours**
Did you know multivitamins contain vitamin K?

- **Important:** If you are on a multivitamin take it every day.
- If you start or stop a multivitamin be sure to let the Coumadin Clinic know.
Did you know that there are over 200 prescription medications that can interact with Coumadin®?
What if I am taking other anticoagulants?

- Warfarin
- Plavix
- Aspirin 81mg
What should I do when starting a new medications?

When in doubt, call!
Side Effects
What to expect while taking Coumadin®

- Since Coumadin® slows down clotting time, you may notice that you bleed for a longer period of time when you cut yourself.
- You may also notice that you bruise more easily than before.
What NOT to expect while taking Coumadin®

- Black, tarry stools
- Blood in the urine
- Coughing up blood (bright red or coffee ground appearance)
- Vomiting blood
- Unusual and excessive bruising
- Nose bleeds lasting for more than 5-10 minutes or saturating multiple tissues with bright red blood

♫ Seek care immediately if you notice any of the above signs
Seek medical attention *immediately* if you have...

- A serious fall or if you hit your head
- Heavy, severe bleeding
What should you do while taking Coumadin®?

- Tell anyone giving you medical or dental care that you are taking Coumadin®
- Notify the Clinic if you are going to have a procedure that you need to stop Coumadin for.
What should you do if you miss a dose of Coumadin®?

- Do not take a double dose of Coumadin® the next day to make up for a missed dose
  - Take the missed dose as soon as possible on the same day.
  - Call the Clinic if you forget to take a tablet and don’t know what to do.

- Use a dosage calendar to keep track of your Coumadin® doses. One will be provided to you at each visit.
What other things can help?

- You may want to wear medical identification

www.medicalert.org
All brands (Coumadin, Warfarin, Jantoven) have the same color for each strength.
Important things to remember:

- Take Coumadin® at the same time every day
- Call the Anticoagulation Clinic if you have any questions

CONSISTENCY AND MODERATION
TRUE or FALSE

1) Iceberg lettuce contains a high amount of Vitamin K.  **F**

2) I should call the Coumadin Clinic when I start or stop a medication.  **F**

3) I should avoid all green leafy foods containing Vitamin K while taking Coumadin.  **F**
Coumadin Education Class Post test

TRUE or FALSE

4) Over the counter medications do not interact with Coumadin.

5) Vitamins or herbal products do interact with Coumadin.
6) I should separate my Coumadin dose and fiber products by at least 4 hours.

7) _______________ is the safest over the counter medication to take for pain when taking Coumadin.