HeartHelp
Keeping You In Rhythm

The Beat

Author: Kacy S. Jones, MSN,ACNP

VOLUME 2 ISSUE 10 MAY 15, 2014

SPECIAL POINTS OF INTEREST:

- **Atrial Fibrillation**
- **Pulse Check**
- **Popsicles**
- **Antibiotics for Dental Procedures**

INSIDE THIS ISSUE:

New Guidelines for Atrial Fibrillation

In March, the American College of Cardiology, American Heart Association, and the Heart Rhythm society released the new recommendations for treatment of atrial fibrillation. So what's new since the last guidelines were released? One of the biggest changes is the recommended model used to determine who should be on aspirin and who should be on a stronger blood thinner such as coumadin or one of the newer agents. Previously, the CHADS scoring system has been used. A newer updated model has since come into play called the CHADS-VAS scoring model. This model is more comprehensive and has more categories. Many cardiologist have been using this in practice for some time already, however it is now recommended in the guidelines. The picture to the right shows the scoring system. For each disease process or risk factor 1 or 2 points is assigned. If the score is 2 or greater, then the risk of stroke is thought to outweigh the risk of bleeding for most individuals and a blood thinner such as coumadin or one of the newer agents would be recommended. The score in the right box correlates to the estimated stroke risk per year in the next column. The recommendations also highlight that it does not matter if you are out of rhythm all the time (permanent) or just for short periods (paroxysmal). If a blood thinner is needed, it is needed regardless of the treatment approach to atrial fibrillation.

Risk factors		
C	Congestive Heart Failure	+1 point
H	Hypertension	+1 point
A_2	Age ≥75	+2 point
D	Diabetes	+1 point
S_2	Stroke/TIA History	+2 point
V	Vascular Disease	+1 point
A	Age 65-74	+1 point
S	Sex (Female)	+1 point

Stroke risk per year	
SCORE	% RATE PER YEAR
0	0%
1	1.3%
2	2.2%
3	3.2%
4	4.0%
5	6.7%
6	9.8%
7	9.6%
8	6.7%
9	15.2%

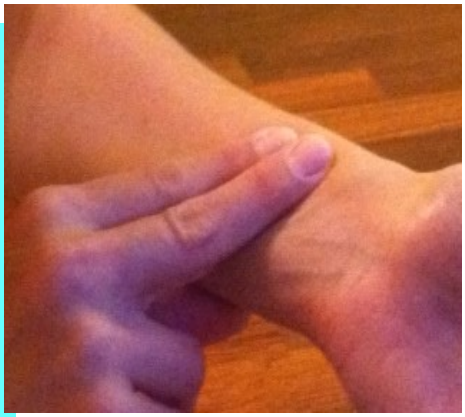
Reference: European Heart Rhythm Association. Guidelines for the management of atrial fibrillation: the Task Force for the Management of Atrial Fibrillation of the European Society of Cardiology (ESC). *Eur Heart J.* 2010;31(19):2369-2429.

In keeping with the blood thinner theme, the guidelines now support the use of the newer blood thinners. (1) (pg 3)

Tip of the Month

How to check your Pulse (Heart Rate):

1. To take your first two fingers of your dominant hand.
2. Flip your other hand over, palm up.
3. Place your two fingers to the left side of the wrist.
4. Apply a light pressure until you feel a pulsation.
5. If the heart rhythm is normal, this should be a very steady beat or pulse. If it is irregular, contact your health care provider if you do not have a history of abnormal heart rhythm problems.
6. To get the pulse or heart rate, count the number of pulsations you feel in one minute. This is your heart rate or pulse.
7. Normal for most people is between 60-100 beats per minute. (3).



Healthy Strawberry Banana Popsicles

Ingredients:

1 cup vanilla yogurt

1 banana

1\2 cup sliced strawberries

1 tsp vanilla

1\4 cup orange juice

Directions:

Combine yogurt, banana, vanilla, and orange juice in the blender

Place strawberries evenly in the popsicle holder

Pour blender mixture over the fruit

Freeze

Enjoy!

Health Information

Serving size: 1 popsicle
Calories: 89.5
Total Fat: 1 g
Sat Fat <1 g
Sodium 37.5 mg
Cholesterol 4 mg
Carbs 18 g
Protein 3 g
Sugars 14 g
Fiber 1 g
Potassium 260 mg

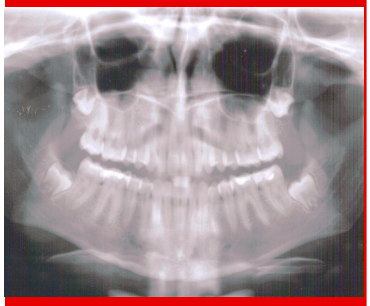
Quote of the Month:

"Happiness is not something readymade; It comes from your own actions" Dalai Lama.

Bible Verse of the Month:

"Do not be wise in your own eyes; Fear the Lord and depart from evil. It will be health to your flesh, and strength to your bones" Proverbs 3:7-8.

Did you Know?



Do you need an antibiotic before dental procedures? For years, many individuals with heart conditions were given antibiotics prior to dental procedures. However, over the last few years, the recommendations have changed. Very few individuals now actually need to be treated with antibiotics. The highest risk of getting an infection in the heart with a dental procedure include the following heart conditions:

-A prosthetic heart valve
-A heart valve repair with prosthetic material
-Previous history of endocarditis (infection of the heart)
-Cardiac transplants with cardiac valve disease
-Certain congenital heart disease patients, especially if the abnormality is unrepaired or repaired with a prosthetic material.

If an individual is able to take an antibiotic by mouth and does not have a penicillin allergy, Amoxicillin is the drug of choice. If a penicillin allergy is present, then Keflex, Clindamycin, or Azithromycin can be used. There are injections that can be given if needed. The antibiotic should be given 30-60 minutes prior to the dental procedure.

Antibiotics should be given if there is going to be any manipulation with the gums, teeth, or lining of the mouth. There are certain situations such as taking a routine x-ray in which an antibiotic would not be needed. Certainly knowing what needs to be done prior to going in would be helpful. (2).

The newer agents include Pradaxa (dabigatran), Xarelto (rivaroxaban), and Eliquis (abixaban). Certainly Coumadin (warfarin) may still be used as well. People that should not receive the newer blood thinners include people with mechanical heart valves, people with a valve problem that caused the atrial fibrillation, and people with end stage kidney disease. Before one of the newer blood thinners are started, the kidney function should be evaluated with a blood test. The kidney test should also be repeated at least yearly (if not sooner depending on the patient's stability) to evaluate for dosing changes. If Coumadin is being used and the INR is unable to be controlled, then a newer blood thinner should be considered.

As far as the treatment approach to atrial fibrillation, not too much has changed. The two approaches are rate control and rhythm control. In rate control approach, only the heart rate is controlled and the patient remains in atrial fibrillation. The medications used to control the heart rate include the beta blockers (metoprolol, atenolol, carvedilol etc.), calcium channel blockers (diltiazem, verapamil), digoxin, and in rare cases amiodarone. The medications used to control the rhythm include Flecainide, Propafenone, and Disopyramide if there is no history of blockages in the heart or structural heart disease. Unfortunately, that is a small population of patients that suffer from atrial fibrillation. So the remaining drug options include Sotalol, Tikosyn, Multaq, and Amiodarone.

The next treatment option has moved up the ranks a little bit, it is a catheter ablation for atrial fibrillation. There is now a strong recommendation for ablation after failure or intolerance to at least one of the antiarrhythmic drugs listed above. The ablation should mainly be considered for individuals who are highly symptomatic with their atrial fibrillation and whom wish and or need to stay in normal sinus rhythm. There is a weaker indication to do the ablation as a first line therapy before antiarrhymthics have been initiated. This decision to proceed with an ablation should be made after careful consideration and discussion with your cardiologist.

A lot has changed over the last few years with atrial fibrillation. The main changes revolve around the new options for blood thinner. While it may make the decision making process a little bit harder, it is always nice to have more treatment options. Advancing technology and techniques for catheter ablation has also improved treatment for atrial fibrillation. While there still is not a cure, it will be exciting to see what the next 5-10 years holds.