

AL POINTS OF INTER-

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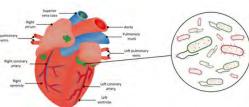
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What is Endocarditis?

What is endocarditis?

Endocarditis is an infection of the heart. The infection itself usually involves the heart valves (there are 4 of them), but it can occur in other areas of the heart. As represented by the green areas in the picture to the right, there will be a lesion on the heart known as a "vegetation". This is essentially a ball of bacteria. A vegetation can sometimes be seen on an echocardiogram (ultrasound of the heart), but usually requires a TEE to be seen. A TEE (transesophageal echocardiogram) is an ultrasound of the heart done from the inside by passing a probe down the food pipe. So who gets endocarditis?

Endocarditis



Endocarditis can occur in anyone but there are some higher risk groups. The first group is children. Generally, these children usually will have congenital heart disease of some kind that increases the risk for endocarditis. Many who develop it have undergone a procedure for the heart that involved a catheter or a cardiac surgery. In adults, a predisposing factor is the presence of mitral valve prolapse, history of rheumatic

heart disease or congenital heart disease. People who use IV drugs are at higher risk of developing endocarditis, especially if they have a prosthetic heart valve or history of rheumatic heart disease.

People who have HIV or AIDS and use IV drugs are at higher risk as well and their outcomes are poorer because they cannot fight infection as well. People with prosthetic heart valves are at higher risk, as well as people who have central lines (long term IVs) and dialysis catheters. Pacemakers and defibrillators can get infected as well and cause endocarditis. This can happen early on after the procedure is completed or can happen years later from a secondary source such as dialysis. Cont....Page 3. (1).

Tip of the Month

Easy Exercises:

- I. Hold arms out to form a T and put palms facing down. Do arm circles for 30 seconds.
- 2. Hold arms out with elbows at 90 degree angle. Reach up to the sky and back down. Do this for 30 seconds.
- Put arms at your side. Curl arms up using your own resistance. Repeat for 30 seconds.
- Sit in chair. Extend one leg at a time for 30 seconds. Then repeat with other leg.
- 5. Hold chair back for support. Pump calves or 30 seconds.(2).





Recipe from "Breaking the Salt Habit" by Erik Williams.

Scalloped Potatoes

<u>Ingredients:</u>

- 11\2 lbs. Potatoes, sliced thin (about 4 medium potatoes).
- 3\4 cup Onion, chopped
- 4 Tbsp. Unsalted Butter,
- 1 tsp. Garlic Powder
- 2 Tbsp. All-Purpose Flour
- 1\4 tsp. Black Pepper
- 1 1\4 cup Skim Milk
- 1 Cup Shredded Cheddar Cheese (optional)
- 3\4 cup Plain Panko Bread Crumbs
- **Non-Stick Cooking Spray**

Directions:

- Spray an 8x8 (2 quart) dish with non-stick cooking spray.
- Layer half of potatoes and half of onions in bottom of dish.
- In saucepan, melt 2 Tbsp. unsalted butter; Stir in garlic, flour, and pepper until smooth. Gradually add milk and cheddar cheese.
- Heat until sauce thickens. When sauce is done, pour half over potatoes in dish.
- Add the other half of potatoes and onions to dish. Top with remaining sauce.
- Cover with foil and bake for 45 minutes at 350 Degrees.
- (While potatoes are baking) In a small bowl, melt remaining 2 Tbsp. butter, add bread crumbs.

- After baking for 45 minutes, take out of oven and top with bread crumbs.
- Continue to bake uncovered for 15 more minutes.

Nutrition Info

Yields 10 servings 1 Serving = 1/2 cup

Calories: 190 Total Fat: 9g Sat Fat: 5g Cholesterol: 25mg Potassium: 446mg Carbohydrates: 23g Protein: 6g Fiber: 2g Sugar: 1g Sodium: 95mg

Quote of the Month: "The man on top of the mountain didn't fall there." Vince Lombardi

Did you Know?



Did you know that there are now MRI safe defibrillators and biventricular defibrillators available on the market? In 2011, the first MRI safe pacemaker was approved by the FDA. But it wasn't until last year that the FDA approved the first MRI safe defibrillator and biventricular defibrillator. Initially, Medtronic was the only company that had an MRI safe device approved in the United States, but now Biotronik is added to the list. The other companies including St. Jude and Boston Scientific are still pursuing the approval and relabeling process. However, it appears that MRI safe technology is here to stay. Over time devices will gradually be changed out with MRI safe devices, however the leads or wires themselves may not be MRI safe.

So what is the danger having an MRI with a pacemaker or defibrillator? There is a chance that the MRI could inhibit pacing. In people who are dependent on their pacemaker, this could be an issue. In ICDs, inappropriate shocks could occur. The leads could also get heated which could cause damage to the lead or even failure of the lead. With that said, many individuals with devices have safely undergone MRIs when they were medically necessary. For now there are still limitations on who should or could go for an MRI if a pacemaker or defibrillator is in place. However, at least now it can be considered. And for the individuals who are receiving the newer MRI safe devices, it will not even be an issue. Hopefully in the future, all devices will be MRI safe. (3,4,5).

THE BEAT AUTHOR: KACY S. JONES, MSN, ACNP What are the signs and symptoms of endocarditis? Most of the time a fever is present unless the individual is elderly or very debilitated. Other symptoms include muscle aches, join pains, stroke or stroke-like symptoms, confusion or mental changes, headache, seizures, abdominal pain, shortness of breath, and swelling. On physical exam a new murmur may be heard. Small lesions that are purple in color may be seen in the eyes, mouth, palms of the hand, soles of the feet, and or nail beds.

How is endocarditis diagnosed? As discussed earlier, when endocarditis is suspected, a TEE is usually completed. Blood cultures are also drawn to detect the type of bacteria that is present in the body so a specific antibiotic can be given. Other labs or scans may be done as well depending on symptoms.

What is the treatment for endocarditis? Treatment is aimed at killing the bacteria in the vegetation and treating the complications of the infection. Depending on the severity of symptoms and the size of vegetation this is done with antibiotics and also surgery when needed.

How can endocarditis be prevented? Endocarditis can be reduced by surgically correcting congenital heart disease when possible. Good oral hygiene is a must for everyone. Treating infections promptly and taking full courses of antibiotics when ordered is necessity. Avoiding infection sources such as having chronic catheters in the blood vessels and or urinary catheters can also help reduce endocarditis chances.

Who needs an antibiotic before dental procedures? Antibiotics are only needed for a select group of high risk individuals which are listed below. If you are not sure, ask your healthcare provider. As always, there may be exceptions to this list. Antibiotics prior to a dental procedure are needed if you have:

- 1. Prosthetic heart valve
- 2. Previous endocarditis
- 3. Some cases of congenital heart disease
- 4. Cardiac transplant recipients who have developed a cardiac valvulopathy.
- (1).