ACTIV DOCTORS
ONLINE

Second Opinion for Mr. John Smith

Reason for Request: Mr. Smith, who was recently hospitalized for atrial fibrillation and a heart attack, has requested our opinion on whether bypass surgery is necessary for him.

Disease History: Mr. Smith 78 years old and was recently hospitalized for chest pains and palpitations. On arrival to the emergency room, he was found to be suffering from atrial fibrillation, an arrhythmia (unusual heart rhythm). His blood tests showed that he was having a heart attack too. Once his condition was stabilized, he underwent a nuclear medicine stress test. The stress test was positive, indicating that he was at risk for further heart attacks. He then underwent cardiac catheterization. The catheterization revealed blockages in two of his three main heart arteries. There were 90% blockages in the middle sections of his Right Coronary Artery (RCA) and his Left anterior Descending Artery (LAD). His cardiac surgeon has recommended bypass surgery.

Other Past Medical History: Mr. Smith's other medical conditions include High Blood Pressure and High Cholesterol. Both were well controlled at the time of his heart attack. He had smoked for 55 years, but quit 3 years ago.

Medications: At the time of his heart attack, Mr. Smith was taking Metoprolol XL 50mg and Lipitor 10mg, each once a day. In the hospital, digoxin 0.125mg once a day was added. In addition, he was placed on Lovenox, an injectable blood thinner, during his hospital stay.

Review of Mr. Smith's Medical Issues: There are two main issues here. The first is the Atrial Fibrillation (Afib). Afib frequently causes very fast heart rates, up to 150-160 beats per minute. Afib can be triggered by myocardial ischemia (the heart not getting enough oxygen because of artery blockages). The fast heart rate can also trigger myocardial ischemia and heart attacks, causing a vicious circle. Mr. Smith underwent an echocardiogram, or sonogram of his heart. This showed a slightly enlarged Right Atrium, a small chamber in the heart which controls heart rate. If a patient has atrial fibrillation and an enlarged Right Atrium, they should ideally be on strong blood thinners (Coumadin, Pradaxa, or Lovenox) for life. Otherwise, their risk of a stroke goes up significantly.

The second issue is the heart artery blockages. At 90%, Mr. Smith's arteries should ideally be opened or bypassed to prevent further heart attacks. His echocardiogram showed that his heart is still pumping normally. (His ejection fraction was 55% - normal). This means little

damage had been done to his heart so far. Even without Afib, Mr. Smith would be in serious danger of a major heart attack from either of the two blockages found.

Specific Discussion of Second Opinion Question: This case was reviewed by Dr. Charanjit Khurana. His credentials follow at the end of this report. According to Dr. Khurana, there is a scoring system, called the Syntax score, used to determine the need for bypass surgery versus angioplasty (opening a blockage by balloon with another catheterization). Based on the results of Mr. Smith's catheterization report, his Syntax score is a 5. This puts him in the low risk category. This means that his three year MACCE risk (the risk of having another heart attack or a stroke) is the same regardless of whether he has angioplasty or bypass surgery now. As a result, Dr. Khurana recommends the less invasive angioplasty as a next step.

If Mr. Smith does opt for angioplasty, there is another consideration. Most of the time, an angioplasty includes the placement of a stent. A stent is a small tube placed inside the artery to hold the artery open better after the angioplasty. There are two main types of stents used, coated and uncoated. Coated stents require that the patient take a blood thinner, called Plavix, for life. The blood thinners used for Afib are different, and not interchangeable with Plavix. If a coated stent is used, the patient will need to be on two different strong blood thinners. The additive effect can result in increased bleeding problems. As a result, Dr. Khurana recommends the use of a non-coated stent. The non-coated stents require only one month of Plavix use.

Please contact Activ with any further questions.

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Consultant
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Training: Cleveland Clinic and George Washington University
Current Position: Director of the Cardiac Catheterization Laboratory at Virginia Hospital Center

As this is a sample second opinion, only one consultant was used. For an actual second opinion, your file will be sent to at least two consultants for expert review.