



Comparative analysis of homeopathy, ayurveda, and allopathy in the treatment of vascular coronary artery disease and common misconceptions.

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Research & Development

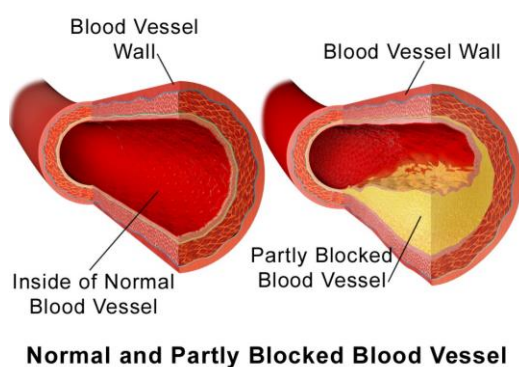
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Abstract- Coronary artery disease is caused by plaque buildup in the wall of the arteries that supply blood to the heart (called coronary arteries). Plaque is made up of cholesterol deposits. Plaque buildup causes the inside of the arteries to narrow over time. This process is called atherosclerosis. By identification at early stages and maintain of healthy lifestyle with supplementary usage of blood thinners like aspirin can stop the condition from worsening further. Although numerous remedies are prescribed in ayurveda they can only be considered safe for prevention but not as a exclusive cure in critical cases.

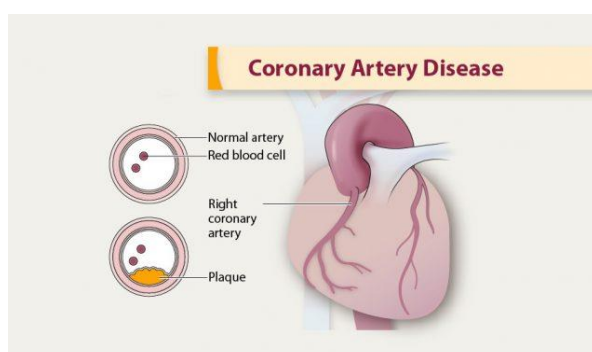
Index Terms- Plaque,angina,stent,bypass

I. INTRODUCTION

Coronary artery disease is caused by plaque buildup in the wall of the arteries that supply blood to the heart (called coronary arteries). Plaque is made up of cholesterol deposits. Plaque buildup causes the inside of the arteries to narrow over time. This process is called atherosclerosis.



Plaque deposited artery



Possible symptoms of coronary artery disease

- Chest pain or discomfort (angina)
- Weakness, light-headedness, nausea (feeling sick to your stomach), or a cold sweat
- Pain or discomfort in the arms or shoulder
- Shortness of breath

At times there may not be any visible symptoms and may lead to a silent heart attack.

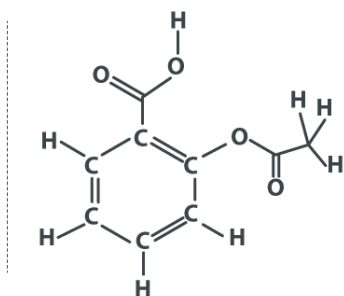
II. PREVENTION

- Prevention of coronary artery disease is possible by keeping blood pressure at check High blood pressure can create microscopic tears in artery walls, which can lead to scarring. Plaque becomes trapped in the scar tissue, causing the arteries to stiffen and narrow. This reduces blood flow to the heart so high blood pressure should be monitored and regulated continuously.
- High levels of cholesterol in the blood cause plaque to build up in the arteries. This can decrease blood flow to the heart, causing symptoms such as chest pain. Plaque can rupture and cause blood clots to form in the arteries. Regular exercise and maintaining a healthy weight can help lower cholesterol.
- Exercise can help prevent coronary artery disease by controlling blood pressure, improving cholesterol levels, and strengthening the heart.
- It is highly suggested for a regular TMT test atleast once in a year and for old aged persons with walking challenges angiogram is suggested.
- Regular monitoring of ECG & heart health will avoid the Coronary artery disease.

III. MEDICATION

A number of safe drugs are available to maintain cholesterol levels & prevent coagulation on blood

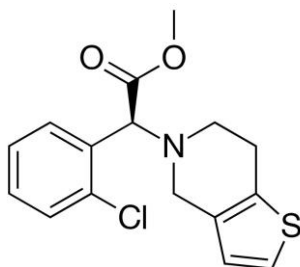
1) Aspirin



Aspirin is in a group of medications called salicylates. It works by stopping the production of certain natural substances that cause fever, pain, swelling, and blood clots. Aspirin is also used long-term to help prevent further heart attacks, ischaemic strokes, and blood clots in people at high risk.

CAS NO: 50-78-2

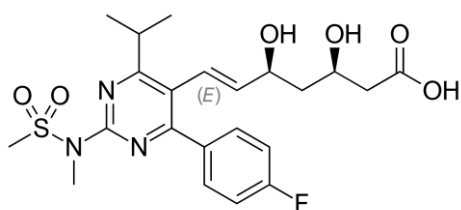
2) Clopidogrel



Clopidogrel is an antiplatelet medicine. It prevents platelets (a type of blood cell) from sticking together and forming a dangerous blood clot. Taking Clopidogrel helps prevent blood clots

CAS NO: 113665-84-2

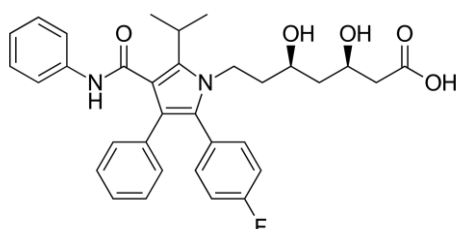
3) Rosuvastatin



Rosuvastatin belongs to a group of medicines called HMG-CoA reductase inhibitors, or statins. It works by blocking an enzyme that is needed by the body to make cholesterol, so this reduces the amount of cholesterol in the blood.

CAS NO: 287714-41-4

4) Atorvastatin



Atorvastatin belongs to the group of medicines called HMG-CoA reductase inhibitors, or statins. It works by blocking an enzyme that is needed by the body to make cholesterol, and this reduces the amount of cholesterol in the blood.

CAS NO: 134523-00-5

If any anomalies are observed in angiogram it is highly recommended to consult the doctor and if necessary an immediate surgical procedures like laying stent or open heart needs to be performed depending on the severity of the ailment.

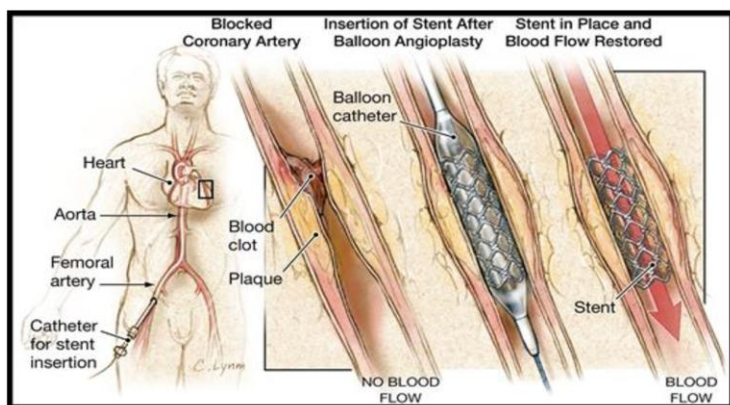
IV. SURGICAL PROCEDURES

In critical cases where the plaque deposition is more than 60-80 % surgery is the only scientific way to treat the disease and avoid fatality. There are a number of surgical procedures available depending on the condition of the patient.

1. Angioplasty

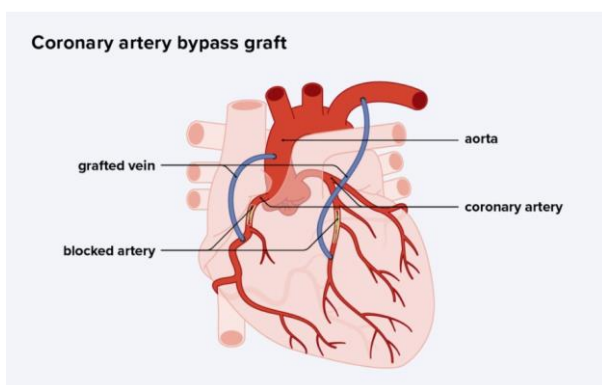
Angioplasty is a minimally invasive procedure used to open or expand arteries that have been narrowed, or blocked as a result of PAD. A small balloon is inserted in to a medical device called a catheter, a flexible tube that can be guided through a small incision that is typically made in the groin (alternative entry sites may be the foot or arm). After insertion, the catheter is guided through the blood vessel to the location of the blockage. Once at the appropriate location, the balloon is advanced through the catheter and inflated. As the balloon is inflated it pushes plaque deposits flat against the wall of the blood vessel, widening the artery and improving blood flow. Angioplasties can be conducted in a hospital catheterization lab or in an outpatient setting by a trained interventional radiologist or vascular surgeon.

2. Stent



stent to fit the artery wall. Then the catheter, balloon and wire are removed, leaving the stent in place. The procedure usually takes 30–60 minutes.

3. Bypass



Open bypass procedure

- **General anesthesia:** After preparing for the surgery, an anesthesiologist will administer a general anesthetic to put the person to sleep and place a breathing tube into the person's windpipe.
- **Harvesting of graft vessels:** Surgeons will remove target vessels from the person's leg, arm, or chest.
- **Incision and opening:** The surgeon will make an incision in the center of the chest and separate the person's sternum to access the heart. They will temporarily stop the heart from beating at this point.
- **Cardiopulmonary bypass:** Doctors may place a person on a cardiopulmonary bypass. This involves connecting the person to a machine that takes over their heart and lung processes. Not all surgeries require the use of this bypass.
- **Grafting:** Surgeons will attach the new graft vessels to either side of the blockages to divert blood flow.
- **Restoring blood flow:** Doctors will remove the cardiopulmonary bypass if necessary and then check that blood is flowing through the grafted vessel correctly.
- **Closure:** After checking blood flow through the graft, the surgeons will fix the sternum with metal wires and sew up the incision site. The person will move to an intensive care unit for recovery.

V. MYTHS & MISCONCEPTIONS

- It is often misconceived that using of certain ayurveda or homeopathic drugs can help with the situation .There are no concrete & scientific studies that can confirm the recovery of patients under critical conditions.
- As so far as the studies go it is not at all suggest risking the life by giving up into Non – scientific theories that suggest avoiding Allopathy medicine & surgical procedures in critical cases.

VI. CONCLUSION

Use of any ayurveda or homeopathic drugs is not suggested by the experts as the use of such medications in critical conditions will only lead to fatality.

As per the research and available data surgery is the only available process to save the patient's life under critical conditions.

Blood anticoagulants & cholesterol medications are suggested by experts only when clogging in the blood vessels are very minimal.patients identified with such symptoms at early stages are suggested to make the medication and healthy lifestyle a daily routine by the physician.

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