

Matters of the heart

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Introduction

It is always important to take care of the heart, but it is especially important for those patients who have already had a heart attack or have existing heart disease. This article will discuss ways in which patients can improve the overall health of their hearts and help prevent the recurrence of a heart attack.

Lifestyle changes to keep the heart healthy

Patients can change their lifestyles to improve their heart function and lower their heart rate. Lifestyle changes may include exercise, reducing risk factors and dealing with stress, anxiety, and depression.

Exercise should include large muscle use and aerobic exercise and may include walking, jogging, swimming, cycling, rowing, and stair climbing. It is important that patients work with a health professional to assist them in drawing up an exercise programme based on their fitness level and abilities, the programme can then be intensified over time.

Patients should exercise three to five times weekly, starting with a 5- to 10-minute warm up, 20 minutes working out and another 5- to 10-minutes to cool down. The warm-up and cool-down periods are essential, and eliminating them can increase the risk of heart-related conditions.

Risk factors should be reduced and include the following:

- Stop smoking
- Cut down on alcohol consumption
- Follow a healthy eating plan in consultation with a dietitian
- Manage high blood pressure
- Manage high cholesterol
- Manage diabetes
- Management of stress and anxiety related conditions – this will require the assistance of a healthcare professional
- Get an annual flu vaccine, the COVID-19 vaccine and, if necessary, the pneumococcal vaccine

The doctor may also prescribe several medications to manage the patient's existing cardiovascular condition. The PA can promote compliance to the medication as prescribed by the doctor. One of these treatments may include the use of daily low-dose aspirin.

How does aspirin work to prevent a heart attack?

The most common forms of cardiovascular disease start when fatty deposits called plaques form on the walls of arteries throughout the body (also called atherosclerosis). When one of these plaques ruptures, through various mechanisms, a blood clot can form. If the arteries in the heart are already narrow due to fatty deposits, the blood clot can block the blood flow to the heart resulting in a heart attack.

Aspirin interferes with the blood's clotting action, preventing the clots and, therefore, potentially preventing a heart attack.

Who should take daily low-dose aspirin?

Patients should only take daily low-dose aspirin if it is recommended to them by their doctor. Low-dose aspirin is usually recommended for the following patients:

- Patients who had a previous heart attack
- Patients with high cholesterol
- Patients with high blood pressure
- Patients who have unstable angina
- Patients who have stable ischaemic heart disease, including those who have had coronary artery bypass surgery
- Patients who have coronary or peripheral artery disease
- Patients who have had a stent inserted in a coronary artery

What are the risks of taking low-dose aspirin?

The main concern with low-dose aspirin use is that it can increase the risk of bleeding, most commonly in the gastrointestinal tract but also in other places, with bleeding

in the brain being the most serious. Some people have a higher risk of bleeding, e.g.:

- Patients older than 65 years of age
- Patients with a history of stomach ulcers
- Patients with bleeding disorders such as haemophilia or Von Willebrand disease
- Patients with alcohol addiction
- Patients on high doses of anti-inflammatory drugs such as naproxen or ibuprofen
- Patients on oral treatment with corticosteroids
- Patients taking other anticoagulants, such as warfarin
- Patients taking certain herbal and dietary supplements such as capsaicin, evening primrose oil, ginkgo, kava, fish oil and others

Other factors that can make aspirin use dangerous can include:

- Patients with kidney failure
- Patients with severe liver disease
- Patients who are sensitive or allergic to aspirin
- Patients with asthma

Patients who are pregnant or breastfeeding should discuss the safety of low-dose aspirin with their healthcare providers before starting treatment.

How to take low-dose aspirin

The protective benefits of aspirin for heart disease occur at doses between 75 and 100 mg per day. Patients should take aspirin once a day during or after a meal, with a full glass of water to help prevent an upset stomach. A missed dose should be taken as soon as the patient realises that it was missed. However, if it is time for the next dose, the usual dose should be taken. It is not recommended to take a double dose to catch up on missed doses.

Table 1 provides a list of some of the low-dose aspirin products available in South Africa.

Table 1: Low-dose aspirin products available in South Africa

Trade name	Description
Aspirin Teva® 80	80 mg dispersible tablets
Bayer® Aspirin Cardio 100	100 mg enteric-coated tablets
Disprin® CV	100 mg dispersible tablets
Ecotrin®	81 mg enteric-coated tablets
Myoprin® 100	100 mg tablets

It is important to take low-dose aspirin as recommended by the doctor. Patients going for dental procedures or surgery should discuss with the doctor treating their heart condition whether aspirin therapy should be stopped or not.

Side effects of aspirin treatment

Some of the side effects of aspirin can include diarrhoea, itching, nausea, skin rash and stomach pain. However,

patients experiencing any of the following should contact their doctor:

- Unusual bruising
- Nosebleeds
- Unusually heavy menstrual bleeding or unexpected vaginal bleeding
- Heavy bleeding after injury
- Blood in the stools or black, tarry stools
- Coughing up blood
- Vomiting material that looks like coffee grounds
- Dizziness or difficulty swallowing
- Wheezing, breathing difficulty, tightness or pain in the chest
- Swelling in the face or hands
- Skin rash, itching, or hives

Conclusion

Patients can reduce the risk of a subsequent heart attack by reducing their risk factors for heart disease and adhering to a healthy diet and exercise programme. Daily low-dose aspirin may be beneficial but is not recommended for everybody. The doctor will assess the patient's age, overall health, history of heart disease and the risk of having a future heart attack to decide whether low-dose aspirin is recommended. Aspirin can increase the risk of bleeding, and those who are recommended to take low-dose aspirin daily should take it with or after a meal.

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