

INTRODUCTION TO
PHYSIOLOGY

ASSESSMENT 1 -
PRESENTATION

TOPIC: HEART ATTACK

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INTRODUCTION

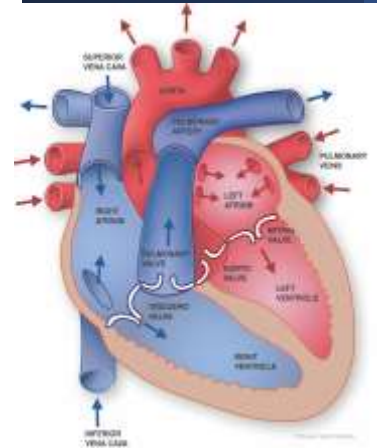
- Heart disease is the leading cause of death in the world.
- This data have been increasing in recent decades due to lifestyle.
- The risk of suffering a heart attack is increasingly common in ages below 60 years old.
- Prevention is one of the most important measures, in order to reduce these data.

(World Health Organization, 2020).

ANATOMY:

- The heart is an organ found between the lungs, slightly to the left of the sternum.
- It is formed by two sides; it has two atrium (one on the right and one on the left) and two ventricles (one on the right and one on the left).
- With four valves that control the blood flow.
- Its muscular layer is known as myocardium, it generates electrical impulses that stimulate the contraction of the heart.
- The heart and the circulatory system form the cardiovascular system.

(The Texas Heart Institute, 2022).



PHYSIOLOGY:

- Deoxygenated blood enters the right side, which is pumped to the lungs.
- Carbon dioxide is released in the lungs and oxygen is absorbed, returning oxygenated blood to the left side of the heart.
- When an artery in the heart is blocked due to the accumulation of fat and inflammatory cells, a heart attack occurs.

(Oliver et al, 2020)

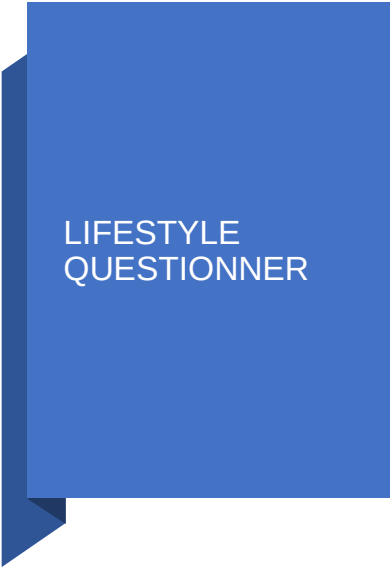


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ASPECTS OF THE QUESTIONNAIRE

Through the following questionnaire is intended to carry out an assessment of patient data related to:

- Eating habits.
- Family history.
- Possible genetic repercussions.
- Lifestyle related to physical activity.
- Use of substances such as alcohol or tobacco.



LIFESTYLE QUESTIONNER

1. Patient A, Woman. Date of birth: 7/05/1970.
2. Current smoker (15-18 cigarettes per day).
3. Alcohol per week: 2-3 times per week (more than 6 units per day).
4. Family history with angina or heart attack: no-one.
5. Ethnicity: White British.
6. Exercise or activities: Less than 3 hours per week.

LIFESTYLE HEALTH-RELATED INFORMATION

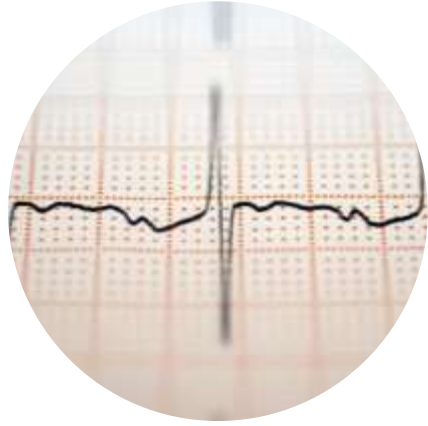
- Patient A has got a poor quality diet (more than 5 meals of junk food per week).
- She is overweight.
- She spends most of the time at work sitting.
- She tried to quit smoking several times using vapers unsuccessfully.



picture from iStock:

HEALTH RISKS

- Tobacco and e-cigarettes contain pro-inflammatory chemicals, causing a greater risk of cardiovascular diseases. (Alarabi et al. 2022, p.4)
- Consumption of more than 20 gr of alcohol per day causes hypertension and arrhythmias. (Cedeno-Zambrano et al.2016, p.23).
- Being overweight increase 28% the risk of heart attack. (National Institute for Health and Care Research, 2017).
- Sedentarism is one of the causes of heart attack. (Ciapa, 2019).



A few years ago it was thought that alcohol in a moderate way prevented heart disease, since the cases of heart accidents in non-alcohol drinkers were statistically equal to or higher than in those who consumed moderately. Today it has been confirmed that it was an erroneous theory. (Shaper, Wannamethee and Walker, 1994. pp 494).

RECOMMENDATIONS

NHS stop smoking services;

One-to-one appointment
with advisers.

Sessions by phone or video
call.

The British Cardiovascular
Society web-side;

Support for rehabilitation
and patient care.

CONCLUSION

An unhealthy lifestyle contributes to heart attacks.

Leading to worsening of the patient's quality of life.

Forcing the patient to create immediate changes.

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