

Programme:	BSc Health and Social Care
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Introduction

This is a case study on patient A who has diabetes as underlying health issue and a very poor lifestyle.

- Lifestyle is directly related to the way of people living, which is limited to groups and communities from specific geographical and economic areas (Kyrou, 2020).
- A poor lifestyle such as eating junk food, smoking, excessive drinking and stressing, can lead to get lifelong illnesses such as diabetes (Desk, 2018).
- In this case study of patient A, there has been observed serious lifestyle issues and as a result a care plan was made in order to rehabilitate and improve the wellbeing of the patient working together with support from local health and care institutions.

WHAT IS DIABETES?

- Diabetes or diabetes mellitus, comes from a group of metabolic diseases in which there is a high blood glucose (sugar in blood), because the insulin production is not consistent, or sometimes because the body's cells fail to interact properly to insulin. People with high blood sugar will usually experience polyuria (frequent urination), they will be thirstier (polydipsia) and hungry (polyphagia) than usual (Lai, 2016).
- Diabetes is a disorder in which there are high levels of sugar in the blood. This is a condition called hyperglycaemia. During digestion, food is broken down to glucose. This then enters the bloodstream and acts as fuel for the body. The pancreas produces a hormone called insulin. The role of insulin is to carry glucose from the bloodstream into the muscle, fat cells and liver where it can be used as fuel. Diabetic people are not able to eliminate this sugar out of the bloodstream because of two primary reasons:
 - 1) they do not produce enough insulin and/or
 - 2) their cells do not respond to insulin. This condition is called insulin resistance (Vijayaraghavan & Crabtree, 2020).

Patient A - lifestyle assessment

Age: 16

Gender: Male

- diet/alcohol intake -----
- drug use
- exercise routine
- sleeping pattern
- social life
- recreational activities/hobbies
- poor diet management, heavy drinker
- heavy smoker including cannabis
- does not rest enough
- spending all day playing games on pc, not going out of the house at all
- no hobbies, no sports/exercise

ANATOMY

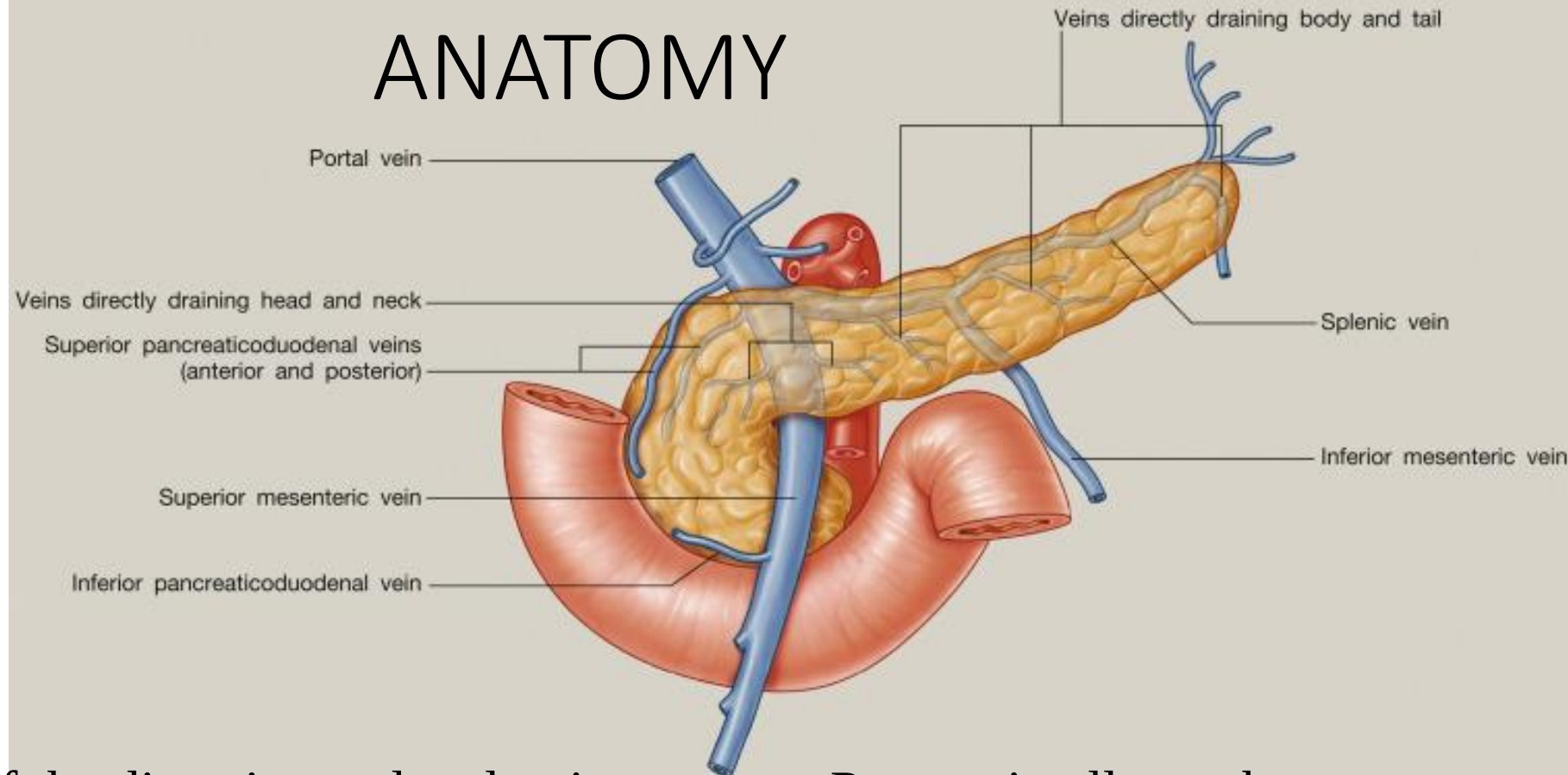


Fig. 2 Pancreas (Mahadevan, 2019)

- Pancreas is an organ of the digestive and endocrine system. Present in all vertebrates.
- Located behind the stomach; regulates blood sugar levels
- Produces insulin hormones, glucagon, somatostatin and pancreatic polypeptide (Wikipedia, 2022)

Physiology

- Pancreas creates natural juices called Pancreatic enzyme to break down foods. These juices travel through the pancreatic duct into the bile duct into the first part of the small intestine. This is called the duodenum (medicine, 2022).

Major Complications of Diabetes

Microvascular

Eye

High blood glucose and high blood pressure can damage eye blood vessels, causing retinopathy, cataracts and glaucoma

Kidney

High blood pressure damages small blood vessels and excess blood glucose overworks the kidneys, resulting in nephropathy.

Neuropathy

Hyperglycemia damages nerves in the peripheral nervous system. This may result in pain and/or numbness. Feet wounds may go undetected, get infected and lead to gangrene.

Macrovascular

Brain

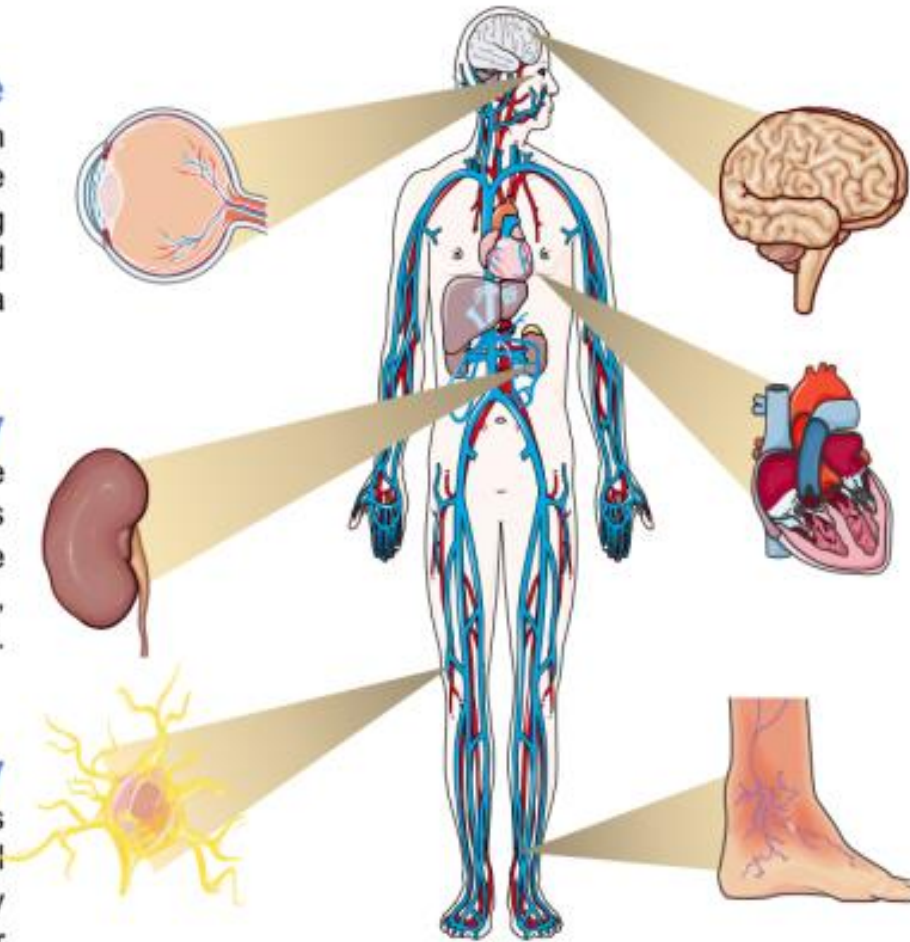
Increased risk of stroke and cerebrovascular disease, including transient ischemic attack, cognitive impairment, etc.

Heart

High blood pressure and insulin resistance increase risk of coronary heart disease

Extremities

Peripheral vascular disease results from narrowing of blood vessels increasing the risk for reduced or lack of blood flow in legs. Feet wounds are likely to heal slowly contributing to gangrene and other complications.



HEALTH RISKS

Fig3. Major complications of diabetes

HEALTH RISKS

- Mental health – untreated diabetes can pose the risk of suffering from anxiety, depression and other mental disorders including learning difficulties
- Hearing loss – diabetes can cause a risk of developing hearing problems
- Ketoacidosis – deposits of ketone bodies and acidity in the blood.
- Peripheral Arterial Disease – Usually leads to pain in the leg, tingling and loss of balance.
- Infections – Diabetic patients are susceptible to infections
- Healing of wounds – cuts and lesions take much longer to heal

Recommendations

- Follow a rehabilitation plan in a rehab centre
- Make changes to his diet and lifestyle such as exercising more often
- Adjust the diet, try to cook fresh more often
- engage in social activities, get involved in appropriate and uplifting environment
- reduce the alcohol intake - seek anonymous alcohol help
- consider quitting smoking and the use of related drugs

Conclusion

A case study has been carried out on patient A. He suffers from diabetes and amongst that he has a very unhealthy lifestyle.

Diabetes affects a lot of people in the modern world. As junk food, restaurants and fast food industry is becoming popular, more and more people adopt a unhealthy lifestyle which has direct negative implications in regards to health.

If diabetes is not detected early and treated right, it can lead to serious life-threatening health issues. In our case of patient A, a care plan was put in place and solution has been offered in order to enhance and improve the wellbeing of the person.

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