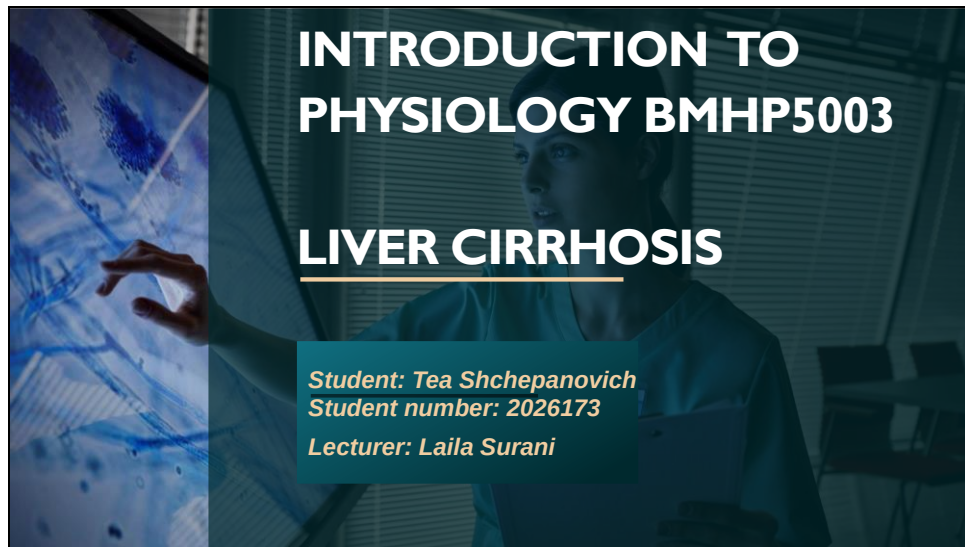
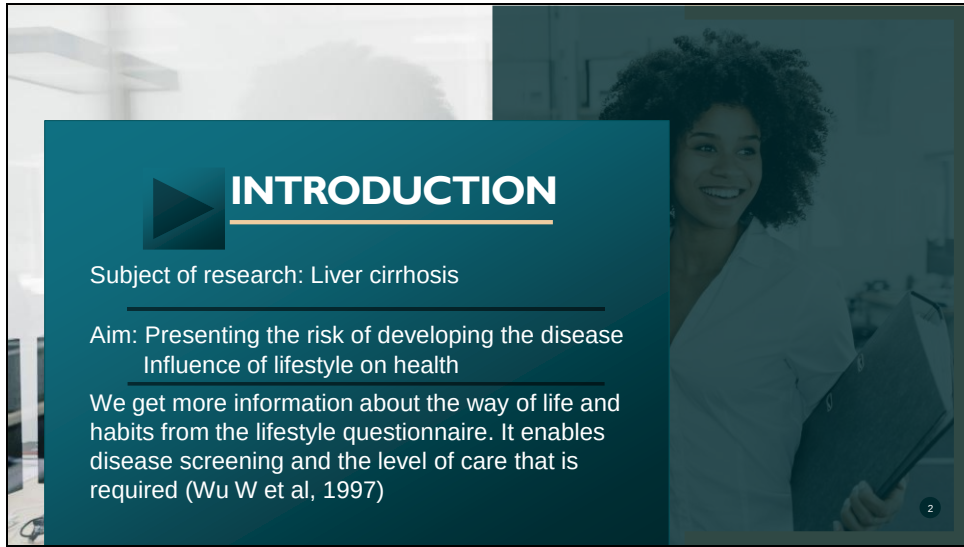


Slide 1



Name of the module is 'Introduction to Physiology'.

Slide 2



INTRODUCTION

Subject of research: Liver cirrhosis

Aim: Presenting the risk of developing the disease
Influence of lifestyle on health

We get more information about the way of life and habits from the lifestyle questionnaire. It enables disease screening and the level of care that is required (Wu W et al, 1997)

The subject of research is a lifestyle disease of the liver - more precisely, cirrhosis of the liver.

The aim of this presentation is to present the risks of disease, which have connection with the way of life we lead, and second aim is to see how our way of life has an impact on our health.

Lifestyle, habits, and behaviour can have a huge impact on our health – BMI (unhealthy diets, obesity), smoking, medication-abuse, addictions, sleep quality, and many more (Farhud, 2015)

With the lifestyle questionnaire, we get more information about the patient's habits, and those information's can help for disease screening as well as the type of care that is needed (Wu W et al, 1997)

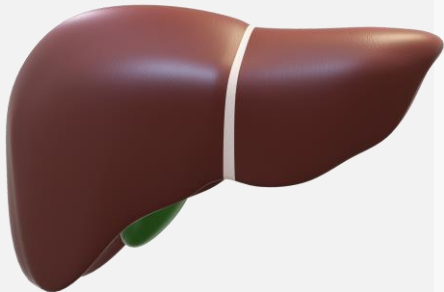
Slide 3

ANATOMY AND PHYSIOLOGY

Liver is part of digestive system.
Location – above and to the right of the abdomen.
Shape – triangular, it has two lobes.
Functions – filtering blood from the digestive system

- detoxication of chemicals/drugs
- making proteins for blood clotting

(Hoffman, 2009)



The scarring + the nodules = LIVER CIRRHOSIS
(NHS, 2019)

3

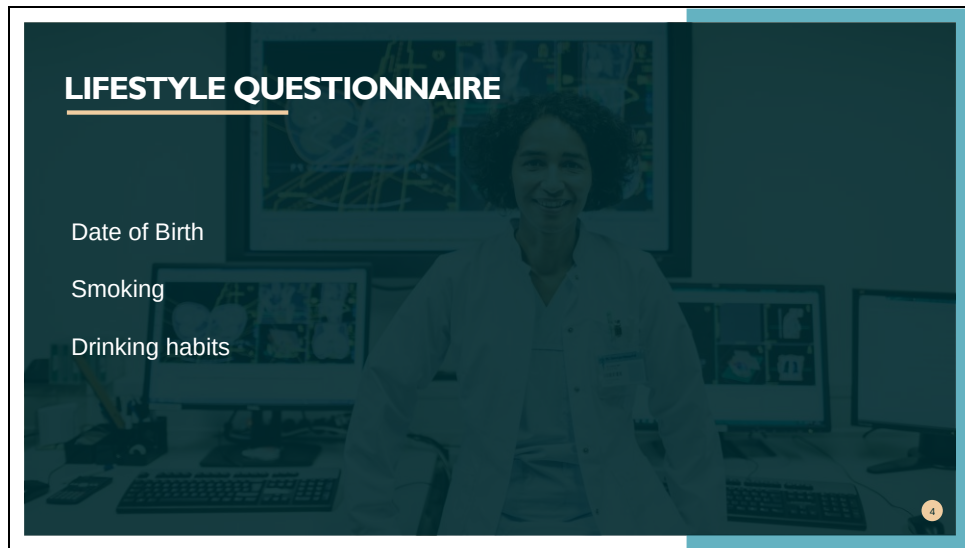
Here we can see liver in 3D, liver lobes, how its separated, and also, we can see Gallbladder – it is located under the liver and stores bile's that liver produces (Hoffman, 2021)

The liver is part of the digestive system located above and to the right of the abdomen, underneath the lungs. It is triangular in shape, red - brown in colour, has a rubbery structure, weighing around 1.44 - 1.66 kg. It has two lobes - the larger right and the smaller left, and they are separated from each other by the falciform ligament (Newman, 2018).

Functions – with over 500 functions (Newman, 2018), main functions are: filtering blood from the digestive tract, detoxification of chemicals and drugs and making proteins for blood clotting (Hoffman, 2009).

Liver cirrhosis is a condition in which all parts of the liver are affected by pathological changes. Liver cirrhosis is a chronic liver disease characterized by progressive deterioration of liver function (NHS, 2019)

Slide 4



Date of birth - aging is a normal process that happens to everyone, and it means a gradual loss of the ability to maintain homeostasis – aging is increasing exposure of the fibrotic response (Kim, Kisseleva and Brenner, 2015).

Smoking – alcohol and smoking habits are interconnected, research shows that using tobacco increases consumption of alcohol (John and Hanke, 2015).

Drinking habits - consumption of alcohol on a daily, weekly, or monthly basis.

Slide 5

LIFESTYLE HEALTH-RELATED INFORMATION

Patient A has 62 years, male, retired.

Patient A is current smoker, smoking 35-38 cigarettes per day, rarely less than 30 cigarettes per day.

Patient A last 5 years drinks 20-23 units per week – weekly two occasions when drinking more than 8 pints of alcohol. It happens two times per month that patient A cannot remember what happened night before.

On housework and gardening, patient is spending more than 1 hour but less than 3 hours.

Slide 6

HEALTH RISKS

Smoking can cause:

1. Lung cancer
2. Respiratory diseases
3. Cardiovascular diseases
4. Lip/mouth/throat cancer (GOV.UK, 2022)

Alcohol misuse can cause:

1. Mouth/throat/stomach cancer
2. Heart disease
3. Stroke
4. Depression (GOV.UK, 2022)

Smoking can cause lung cancer, respiratory diseases, cardiovascular diseases, lip/mouth/throat cancer, but also reduces fertility, and increasing risks for eye diseases, type 2 diabetes, and dementia (GOV.UK, 2022)

Alcohol misuse can cause mouth/throat/stomach cancer, heart disease, stroke, depression (GOV.UK, 2022). According to GOV.UK, more than ten million people consume alcohol at levels above guidance.

RECOMMENDATIONS

According to **British Liver Trust**, if the GP suspects cirrhosis of the liver, following are advised:

1. Routine blood test
2. Liver blood test
3. Tests for different types of liver diseases
4. Immunology tests
5. Endoscopic procedures
6. Liver biopsy
7. Blood clotting test

(British Liver Trust, 2012)

NHS is providing Alcohol Addiction Services, that include:

1. Support
2. Rehabilitation
3. CBT
4. Group therapy
5. Self-help
6. Counselling

(NHS, 2022)

British Liver Trust is UK's largest awareness-raising charity, which, in cooperation with healthcare professionals, provides support and necessary information for patients and also has early-detection/better treatment campaigns. Routine blood test – for checking how kidneys and liver is working, haemoglobin levels for oxygen status, white cell count for immune system.

Liver blood test – checking enzymes and proteins of liver – AST, ALT, Bilirubin, Albumin.

Different types of liver diseases - for Hepatitis A, B, C, fatty liver, Wilsons disease (British Liver Trust, 2012).

NHS has Alcohol Addiction Services that include support that patients need while reducing alcohol, rehabilitation centres, cognitive behaviour therapy, group therapies, counselling, and self-help.

CONCLUSION

Our lifestyle can seriously affect the condition of our body, both physically and mentally.

Liver is a vital organ with over 500 functions.

By reducing smoking and alcohol, we can prevent not just liver cirrhosis, as well many other diseases.

If there are any symptoms, it is important to report them in time and get the necessary care and support.



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References

Askgaard, G., Grønbaek, M., Kjær, M.S., Tjønneland, A. and Tolstrup, J.S. (2015). Alcohol drinking pattern and risk of alcoholic liver cirrhosis: A prospective cohort study. *Journal of Hepatology*, [online] 62(5), pp.1061–1067. doi:10.1016/j.jhep.2014.12.005. (Accessed 26/07/2022)

British Liver Trust (2012). *British Liver Trust - Pioneering Liver Health*. [online] British Liver Trust. Available at: <https://britishlivertrust.org.uk/>. (Accessed 26/07/2022)

Farhud, D.D. (2015). Impact of Lifestyle on Health. *Iranian journal of public health*, [online] 44(11), pp.1442–4. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4703222/>. (Accessed 18/07/2022)

GOV.UK (2022). *Smoking and tobacco: applying All Our Health*. [online] GOV.UK. Available at: <https://www.gov.uk/government/publications/smoking-and-tobacco-applying-all-our-health/smoking-and-tobacco-applying-all-our-health#:~:text=It%20causes%20lung%20cancer%2C%20respiratory>. (Accessed 26/07/2022)

Hoffman, M. (2021). *Picture of the Gallbladder*. [online] WebMD. Available at: <https://www.webmd.com/digestive-disorders/picture-of-the-gallbladder>. (Accessed 22/07/2022)

Hoffman, M. (2009). *Picture of the Liver*. [online] WebMD. Available at: <https://www.webmd.com/digestive-disorders/picture-of-the-liver>. (Accessed 18/07/2022)

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References

John, U. and Hanke, M. (2015). Liver cirrhosis mortality, alcohol consumption and tobacco consumption over a 62 year period in a high alcohol consumption country: a trend analysis. *BMC Research Notes*, 8(1). doi:10.1186/s13104-015-1808-2. (Accessed 26/07/2022)

Kim, I.H., Kisseleva, T. and Brenner, D.A. (2015). Aging and liver disease. *Current Opinion in Gastroenterology*, [online] 31(3), pp.184–191. doi:10.1097/mog.0000000000000176. (Accessed 26/07/2022)

Newman, T. (2018). *The liver: Structure, function, and disease*. [online] www.medicalnewstoday.com. Available at: <https://www.medicalnewstoday.com/articles/305075#structure>. (Accessed 18/07/2022)

NHS (2019). *Overview - Cirrhosis*. [online] NHS. Available at: <https://www.nhs.uk/conditions/Cirrhosis/>. (Accessed 26/07/2022)

NHS (2022). *Find alcohol addiction support services*. [online] nhs.uk. Available at: <https://www.nhs.uk/nhs-services/find-alcohol-addiction-support-services/>. (Accessed 26/07/2022)

Wu W, A., Cagney A, K. and St PD, J. (1997). Health Status Assessment Completing the Clinical Database. *Journal of General Internal Medicine*, [online] 12(4), pp.254–255. doi:10.1046/j.1525-1497.1997.012004254.x. (Accessed 18/07/2022)