

RELATION OF CIGARETTE SMOKING WITH URINE BILIRUBIN

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ABSTRACT

In cigarette smoking smoke is produced by the burning of tobacco which is then inhaled towards the lungs. Cigarette smoking cause various types of diseases in humans. Urine bilirubin is the presence of abnormal amount of bilirubin in the urine. Bilirubin is actually bile which is released from the liver. To check the relationship between cigarette smoking and urine bilirubin I have surveyed 100 people and ask them a question either they smoke cigarette or not. Then I take their urine sample and perform urine test then I got results that 24% males were smokers with bilirubin was present in their urine and 16% males were smokers with bilirubin absent in their urine. Similarly, in females 1.3% females were smokers and bilirubin were present in their urine and 2.6% females were smokers with bilirubin absent in their urine. 36% males were non-smokers and bilirubin were present in their urine and 24% males were non-smokers with no bilirubin in their urine. Similarly, 34.6% females were non-smokers and bilirubin were present in their urine and 61.3% females were non-smoker with no bilirubin in their urine.

Keywords: cigarette smoking, urine bilirubin and dipstick.

INTRODUCTION

In cigarette smoking tobacco is rolled in the paper and then inhaled or moved to the blood stream. Due to the tobacco smoking diseases and death rate is increasing day by day. About 6 million people die annually due to the cigarette smoking. It is estimated that in 2030 death rate will be increases to 8 million people each year if this trend of cigarette smoking continues. Half of these deaths occurs in adolescent and half of the people died in the age of 35 to 69 years. Cigarette smoking shorten the human life about 25 to 30 years. When tobacco is burned toxic gases are released such as carbon mono oxide. About 25 diseases in humans are due to the cigarette smoking which includes heart diseases and cancers of lung, oral, urinary bladder and larynx. Some other diseases like asthma, reduced fertility, diabetes, loss of teeth and stomach ulcer are due to the cigarette smoking (Abdulsalam M.A. Nasser, 2018).

Bilirubin is a yellowish substance which is formed during the body's normal process of breakdown of red blood cells. Bilirubin is actually bile which is released from the liver and is used for the digestion of food. Sometimes this bilirubin appears in the urine which is the sign of liver disease. Only conjugated form of bilirubin appears in the urine. When liver is functioning well then this bilirubin is released out of the body. When liver is not functioning well or bile ducts are obstructed then bile is released into the

urine which is the sign of liver infection. This bilirubin level in urine is checked by the urine test dipstick method if bilirubin is present in

urine then color of the strip will be changed. Its symptoms are jaundice, dark colored urine, abdominal pain and fatigue (Kevin F. Foley, 2015).

Methodology

Materials

Gloves, container to collect the urine samples, dipstick which is chemically treated paper and urine samples of male and females.

Method

Wash your hands and wear the gloves then we will take urine samples of male and females in the container. After sample collection dip the stick in the urine for 2 to 3 seconds and after 1 minute color of this strip will be changed which is the indicator that in the urine bilirubin is present or not.

Results and discussion

We performed survey on 100 individuals 25 of which were males and 75 were females. We take their urine samples and get urine test after that we get results that 24% males were smokers with bilirubin was present in their urine and 16% males were smokers with bilirubin absent in their urine. Similarly in females 1.3% females were smokers and bilirubin was present in their urine and 2.6%

females were smokers with bilirubin absent in their urine. 36% males were non-smokers and bilirubin was present in their urine and 24% males were non-smokers with no bilirubin in their urine. Similarly 34.6%

females were non-smokers and bilirubin was present in their urine and 61.3% females were non-smoker with no bilirubin in their urine. Results are shown in the table 1 below

Table1 Relation of cigarette smoking with urine bilirubin

Gender	Smokers		Non smoker	
	Bilirubin in urine present	Bilirubin in urine absent	Bilirubin in urine present	Bilirubin in urine absent
Males	24%	16%	36%	24%
Females	1.3%	2.6%	34.6%	61.3%

References

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