

БИОЛОГИЧЕСКИЕ НАУКИ И ЗДРАВООХРАНЕНИЕ ИННОВАЦИИ В МЕДИЦИНЕ: ОТ ТЕОРИИ К ПРАКТИКЕ

UDK: 57.083.12:616-022.36

Пяткова И. Н.

Одесское областное базовое медицинское училище
Научный руководитель: д. фарм. н., профессор Бушуева Инна Владимировна
Запорожский государственный медицинский университет, Украина, г. Запорожье
valery999@ukr.net

Pyatkova I. N.

Odessa regional basic medical school
Supervisor: Dr. pharm. sc., professor Inna Vladimirovna Bushueva
Zaporozhye state medical University, Ukraine, Zaporozhye
valery999@ukr.net

DETERMINATION OF MICROBIAL LANDSCAPE OF BANKNOTES

Resume

This research work is based on the determination of the pathogens on widely used monetary banknotes. Microorganisms are transmitted to people due to they exchange money is the cause of the spread of a particular disease among most people. Because of money which we transmit each other, we don't see what diseases we get ill. Think yourself that all people use money, that is, we can get money from sick people, hard drinkers, drug addicts, prostitutes, or there is some money lying on dirty places. According to some resources, when money banknotes were investigated for germs, they discovered there various types of pathogens, tuberculosis microbacteria, types of hepatitis, intestine infection disease types (gastroenteritis, dysentery), golden coloured staphylococcus, wide variety of helminthism and other germs. [1.2.3]. Comparing to less used banknote, often used money banknote has got a big amount of pathogens, that means everyday there are much more pathogens on used in life money banknotes of limited copies than in less used money banknotes of unlimited copies. It is because of the big popularity of limited copy money banknotes. There are over 400 different types of dangerous pathogens on money banknotes [4]. If one compares US dollar and Kazakhstan tenge, there are a lot of dangerous pathogens which are kept long on money banknotes.

Key words: staphylococcus, streptococcus, colibacillus, sarcina.

Aim: to determine often used money banknotes pathogens.

Research results:

During bacteriological test, swabs were taken from Kazakhstani tenge banknotes like 200, 500, 1000, 2000 and US dollar banknotes like 100\$ and people who touched them.

Swab tubule is put on to the glass tube adapter and eye measured sugar broth is added into it. 3-4 hours later, tubule was first put into solid nutritious chocolate agar, then was inoculated into yellow pigment with 37 C thermostat for 24 hours. Being in a solid environment, different types of pathogens developed in a result of one microbe cellule multiplication.

Looking through microscope, golden coloured staphylococcus, streptococcus, intestine rod, sarcina were discovered from yellow pigment and chocolate agar (pictures 1a., 1b. 2a. 3a. 4a.).



Staphylococcus aureus 1a.

Staphylococcus aureus 1б.

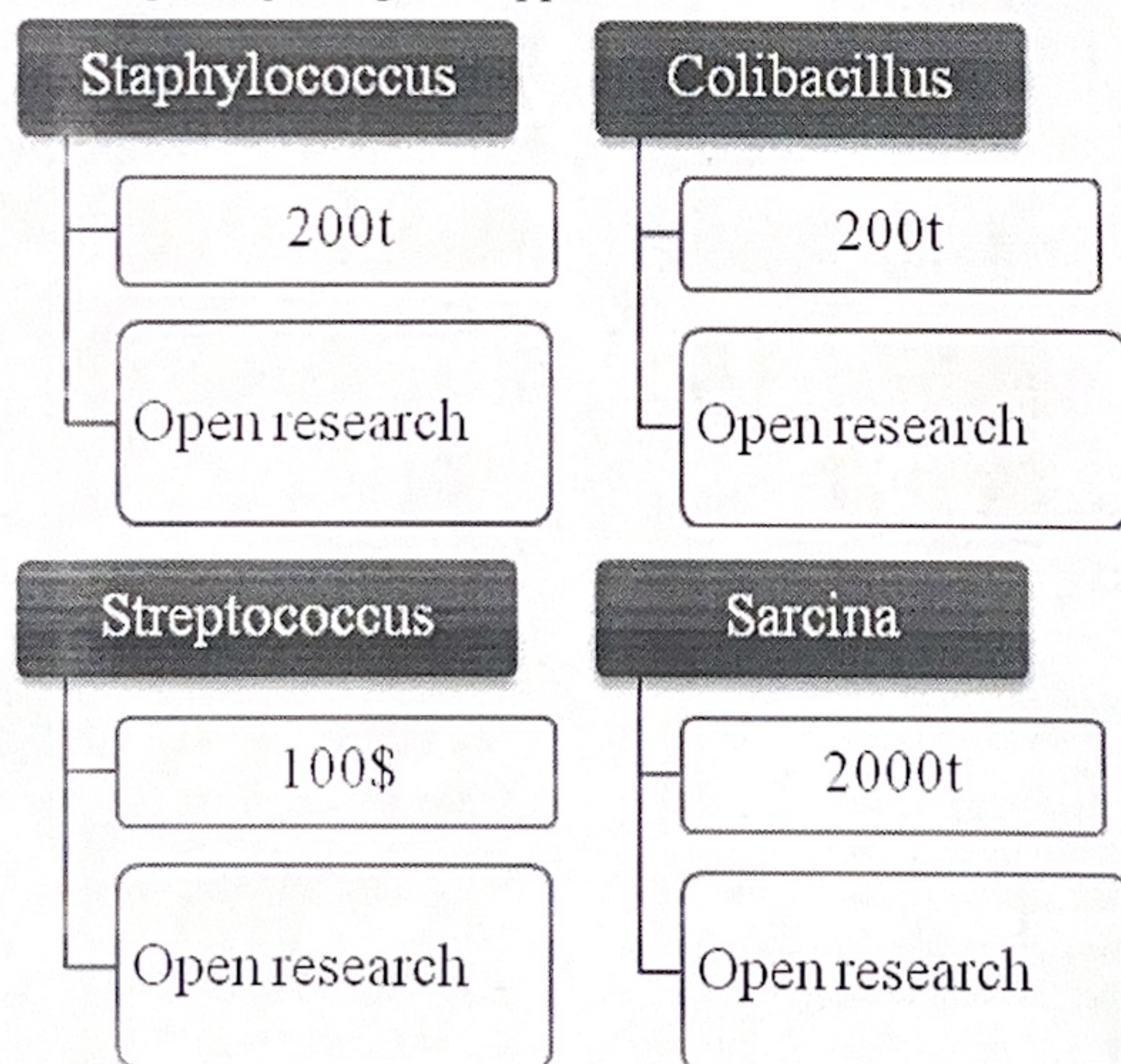
Streptococcus pyogenes 2a.



Escherichia coli 3a.

Sarcina 4a.

Below given pathogens appeared when microbial was discovered on money banknotes.



Pathogens were determined with the help of MicroScan WalkAway device.

Conclusion:

Various pathogens were discovered during the process of determining the microflora on widely used money banknotes. Discovered pathogens can cause some disease among people.