Microbiological Studies on Fly Wings
(Musca domestica) Where Disease and Treat

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Abstract: Over a thousand years ago Prophet Mohammed (Peace Be Upon Him) said “if a fly falls down on your vessel, drown it then remove it, for one of its wings has the ailment and other has the cure “narrated by Al-Bokhari. In this study 4 flies of (Musca domestica) species were collected to investigate the antibacterial and antifungal activity of their wings. The obtained result showed that all media cultivated with right wing extract were free of bacterial and fungal growth however the bacterial and fungal growth for the left wing were observed. It could be concluded that the right fly wing is considered as new revolution of antibiotic recommended for further researches to find more antibiotics from right fly wing.

Key words: Fly Hadeeth - New Antibiotic and House Fly Miracle

INTRODUCTION

There has been so many scientific facts that have been proved in both the twentieth and twenty – first century that confirm the hadeeths of the prophet Mohammed (PBUH) where 1400 years ago; where there were no science, labs or technology to solve many scientific facts. To focus on today is a hadeeth that the prophet Mohammed (PBUH) told us about the fly and how there is a healing exactly. The hadeeth: narrated by Abu Huraira: Allah s apostle said, “ if a fly falls in the vessel of any of you, let him dip all of it (into the vessel) and then throw it away, for in one of its wings there is a disease and in the other there is healing (antidote for it) i.e. The treatment for that disease“ (Al- Bukhari) [1].

Hundred thousands of flies' types exist in the universe; however, just ten types share us living in our houses. The female fly lays down more than hundred eggs in the dung of some animals or in the garbage. After one day, the larva comes out and it feeds from the surrounding environment. Two weeks later, they become full-grown flies. In the four generations, one fly can lay down 1.5 million eggs, but fortunately, the majority dies due to weather circumstances or becomes food for birds and other insects. Maximally, a fly can live for sixty days [2].

The last thing that might come to mind is that we can find antibiotics on the surface of flies. The bioscientist Joanne Clarke observed the flies’ resilience, decided to study flies as a possible source of drugs to combat deadly bacteria. Ms Clarke research showing that flies produce their own antibiotics will lead to better treatments for human infections from Escherichia coli (E coli) and other virulent bacteria even, perhaps, Staphylococcus aureus (S. aureus). Infectious diseases kill at least 17 million people annually [3, 4].

These previous results is being supported by global pharmaceutical company Glaxo Smith Kline over the next six months trying to isolate antibiotic compounds from the material collected from the flies [3, 4].

These days, Russian doctors observed that flies contain many substances that can be more effective using be handling than traditional medications, trying to develop treatments using flies. This new treatment will lead to a revolution in medicine’s world [3, 5].

Entomologist latest research, certify that there is very little difference between a human and a fly-heart where biggest similarity is that both have heart disease as a result of getting older. Studied flies in order to produce cardiac medications [5].
Professor Juan Alvarez Bravo at the University of Tokyo mentioned that is the last one can accept the flies in a hospital! But soon we will witness a rapid treatment for many diseases, which consists of extracts from flies [7].

There are also some researchers in the U.S. dedicated to find new treatments using flies. And they confirm that treatment with the use of flies is scientifically accepted in the near future [3].

Some researchers at Auburn University tried to find a protein in the fly’s saliva, this protein can accelerate the lengthy process of healing wounds and chronic skin cracking. And not too long ago, declared the researchers at Stanford University that the first found of a substance in the fly that can improve the immune system of a human being [8].

Moreover, the researchers also found that the best way to release these vital substances is to dip the fly in the water because these substances are concentrated on the outer surface of the fly’s body and wing [3].

The aim of this research was to clarify the miracle in the hadeeth of the prophet Muhammad (PBUH) by studying the antimicrobial effect of the fly wings. And to understand this aspect from the scientific point of view.

**MATERIALS AND METHODS**

**Collection of Flies:** Four flies (Musca domestica) were collected, the left and right wings for each were separated by sterile forceps.

**Preparation of Wings Extract:** Each fly wing left and right dipped in a sterile labeled test tube containing 5 ml of sterile nutrient broth media. (Purchased from Witan- Biolife Company produced by Jalil Medicals Company).

**Microbiological Examination:** The preparation of both wings extract was incubated for 48 hr at 37°C. One loopful from each test tube was examined microscopically for investigation of microbial presence (bacteria as well as fungi). For further microbiological examination one loopful from each test tube was inoculated in two sterile labeled petridishes containing nutrient agar media and potato dextrose agar media. (Purchased from Witan- Biolife Company produced by Jalil Medicals Company).

The cultivated plates were incubated for 48 hr at 37°C for the bacteria and at 25°C for fungi then the plates were examined for bacterial as well as fungal growth.

**RESULTS**

The cultivated plates on nutrient agar media and potato dextrose agar media demonstrate both bacterial and fungal growth for the left wings extract plates however there were no bacterial or fungal growth for the right ones as shown in pictures (4) and (5).

![Picture (1) and Picture (2)](image1)

![Picture (3)](image2)

![Picture (4) and Picture (5)](image3)

Pic. (1), (2) and (3) illustrated that there were no bacterial or fungal growth in test tubes containing the right fly wing extract however there were microbial growth in 4 test tubes for left wings extract indicated by turbidity which had been confirmed by microscopical examination, the slides for the right wings extract were free for the presence of any microbe although the slides for the left ones showed presence of both bacteria (c cocci and bacilli) and fungi (hyphae).
DISCUSSION

In the latest scientific research scientists have proved that flies the greatest prophet told us about the presence of a cure in its wing, this has certainly proved the truth of this prophetic speech [9].

Abu Hurayrah narrated prophet Mohammed (Peace Be Upon Him) said “if a fly falls down on your vessel, drown it then remove it, for one of its wings has the ailment and other has the cure “narrated by Al-Bokhari [10]. This Hadeeth means that the fly carries on one of its wings a disease and on the other a cure from the same disease. When a fly falls into a container (drink), it puts forward the wing carrying the microbe, as a self-defense. Imam Ibn Hajar said in his commentary on the hadeeth that one of the scholars observed that the fly protects itself with its left wing, so it can be deduced that it carries the cure or the antidote on the right wing. So if the fly is immersed in whatever it falls on, the antidote will destroy the venom or the microbe with the will of Allah. Some people are not pleased with the idea of immersing a fly in one's drink. But no one have the right to disclaim the authenticity of the hadeeth. The hadeeth is strongly authentic, as it is narrated by Imam al-Bukhari. Flies are very common on earth. They are almost 87000 species. It has been scientifically proved that they feed on garbage and waste organic matter of the vast numbers of bacteria, viruses and other various microbes and germs [11].

The present study was carried out to clarify the miracle in the hadeeth of the prophet Muhammad (PBUH) by studying the antimicrobial effect of flies’ wing.

The present study showed that there were no bacterial or fungal growth in test tubes containing the right fly wing extract although there were microbial growth in test tubes for left wings extract indicated by turbidity as illustrated in picture (1), (2) and (3) which had been confirmed by microscopical examination, the slides for the right wings extract were free for the presence of any microbe although the slides for the left ones showed presence of both bacteria (cocci and bacilli) and fungi (hyphae).

The cultivated plates demonstrate both bacterial and fungal growth for the left wings extract plates although there were no bacterial nor fungal growth for the right ones represented in pictures (4) and (5). The results may be directly related to the fact that is logical because the fly has a lot of harmful bacteria on the outside of its body and therefore in order to continue in its life it should also carry antibacterial materials, these material were furnished by God to protect it from viruses, bacteria, fungi and diseases. In addition to what has been reported by scientists from the department of biological sciences, Macquarie university, armed with a theory that flies must have antimicrobial defenses to survive from the feces, rotting meat and fruit [3].

While the previous author reported the antibacterial properties of fly body surface and stomach against \textit{E. coli} and \textit{S. aureus} gold as well as antifungal properties against \textit{Candida albicans} \textit{(C. albicans)} suggested that antibiotic material is extracted by drawing the flies in ethanol, then running the mixture through a filter to obtain the crude extract [3]. Our research may explain why the further microbiological examination of of cultivated plates demonstrates there were no bacterial nor fungal growth on plates from the right wings extract although there were both bacterial and fungal growth from the left ones represented in picture (4) and (5).

Accordingly, what was done by Dr. “Joan Clark” in Australia when she tested four different species of fly (a house fly, a sheep blowfly, a vinegar fruit fly and the control a Queen Island fruit fly) and found that flies have antibiotics on the surface of its body which treat many of the diseases [4].

In addition to work on the theory that flies must have remarkable antimicrobial defenses to survive rotting dung, meat and fruit, the team at the department of biological sciences, Macquarie University, set out to identify those antibacterial properties manifesting at different stages of fly’s development [3, 12].

Moreover the study which was investigated by Aj-Taili, \textit{et al} from the department of medical microbiology, Qassim University in Saudi Arabia, They check the wing flies. As one solution immersed the whole body of flies and one wing dipped in a solution of flies alone again. Apparently the first solution containing antibiotic and the second solution indicate the presence of germs. Concluded that one of the fly wings contain antibiotics while the other wing contain the disease [13].

In agreement with these previously reported results, scientists found that the best way to release this vital antidote is to dip the fly in a liquid because these substances are concentrated on the outer surface of the fly body and wing. Strangely lovers of God that the holy prophet (PBUH) talked about these two facts in one speech where it is not expected ever to find disease and medicine in the same creature, flies [9].
The results obtained were also substantiated by Hakimatul-Faith Indonesia who stated that flies can be used as a natural antibiotic, although this is not prevalent among the public, but in one circles is flies used as an antibiotic is a natural and familiar and its powerful enough to treat various diseases especially those caused by viruses and bacteria and it is an antibiotic without side effects and of level super [14].

More over Entomologist certify their latest research, that there is very little difference between a human and a fly-heart!Biggest similarity is that both have heart disease as a result of getting older. And it flies well researched in order to produce cardiac medications. Thus, flies have two cures [6].

In addition to what was mentioned by Professor Juan Alvarez Bravo at the University of Tokyo, said: “The last one can accept the flies in a hospital! But soon we will witness a rapid treatment for many diseases, which consists of extracts from flies [7].

There are also some researchers in the U.S. dedicated to find new treatments using flies. And they confirm that treatment with the use of flies is scientifically accepted in the near future [3].

And what was reported by some researchers at Auburn University to find a protein in the fly’s saliva, this protein can accelerate the lengthy process of healing wounds and chronic skin cracking. And not too long ago, declared the researchers at Stanford University that they first found a substance in the fly that can improve the immune system of a human being [15].

CONCLUSION

From the present data it could be concluded that the right wing of fly is considered as new revolution of antibiotic, for this reason it is recommended to do further researches to extract a lot of antibiotics from right fly wing.

Also this information has not been discovered only a few years ago. This speech testifies the honesty of our prophet (PBUH) and also it contain a replay to any one claiming that the talks of prophet are full of myths moreover every word uttered by him is right from God the almighty.

REFERENCES

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