iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 7 **Issue:** VIII **Month of publication:** August 2019

DOI: http://doi.org/10.22214/ijraset.2019.8085

www.ijraset.com

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.177
Volume 7 Issue VIII, Aug 2019- Available at www.ijraset.com

A Case Study on Tonsillitis

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Abstract: ***The current case study is an important health issue among adults and especially children. The case study is about a 29 year old woman who has been suffering from repeated attacks of severe tonsillitis after drinking bottled water. Tonsillitis is an inflammation of lymphoid glands. It can be caused by bacteria as well as viruses. The bacteria which causes tonsillitis is Streptococcus pyogenes. This bacteria can be transmitted through Skin Exposure, Inhalation Mucous Membrane Splash to eyes, nose or mouth and ingestion of contaminated food and water. The woman under study was noticed to have been suffering from tonsillitis everytime she consumed bottled drinking water.***

Keywords: Tonsillitis, Bottled drinking water, Streptococcus pyogenes, faecal contamination

I. INTRODUCTION

Tonsils are situated at the back of the throat. They are collections of lymphoid tissue that form part of the immune system. The tonsils are the immune system's first line of defense against bacteria and viruses that enter the mouth. They produce white blood cells to help your body fight infection. This function makes the tonsils particularly vulnerable to infection and inflammation. The most common complication is a build-up of pus around the tonsils. When the tonsils become infected, the condition is called tonsillitis. Though tonsillitis is usually caused by viruses, bacterial tonsillitis is also seen in humans. Tonsillitis can occur at any age and is a common childhood infection. It is most often diagnosed in children from preschool age through their mid teens. Symptoms include a sore throat, swollen tonsils, high fever etc.

Tonsillitis is contagious and can be caused by a variety of common viruses and bacteria, such as Streptococcus pyogenes, which causes strep throat. Tonsillitis caused by strep throat can lead to serious complications. There are many natural sources of Streptococci, including humans and diverse animals where they often colonize the mucosal surfaces of mouth, intestinal tract, nasal passages and pharynx. The presence of Streptococci in drinking water indicates faecal contamination. Food sources with high risk of Streptococcal contamination include milk and dairy products, eggs, steamed lobster, ground ham, potato salad, custard, rice pudding and shrimp salad. In most Streptococcal food poisoning cases, the food was allowed to stand at room temperature for several hours between preparation and consumption. The contamination of the food is most often the result of poor hygiene, handling of the food by infected people, or the use of raw (unpasteurized) milk.

II. METHODOLOGY OF STUDY

The Woman under study was suffering from the following symptoms: high fever, headache, chills, ear pain, fatigue, vomittings, sore throat, swollen tonsils, body pains, unable to swallow any food due to swelling in throat. All these only after drinking the bottled water in her house. The water was brought from outside filtration units which sell water at a price as cheap as 3-4Rs/20lt.Though the water is filtered but on a later observation it came to the notice that the filtration unit was not hygienic. The place was near a GHMC dust bin. Even the bottles in which the water is filled are not tidy. Though they are reusable but they are not being washed or cleaned properly. The person handling the filtration unit as well as the water bottles also did not maintain cleanliness. The symptoms which the woman suffered were found to be of that caused by Streptococcus pyogenes. And one of the modes of transmission of this bacteria is through consuming contaminated food and water, contamination of faecal matter in particular.

Swollen tonsils

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III. DISCUSSION

The woman under study was suffering from repeated attacks of tonsillitis of about 3-4 times per year and she observed that it is after drinking the bottled water. This means that either the filtration units which are installed are not maintained properly or the bottles which are being re-used are not cleaned thoroughly or it can also be that the persons handling the water are not maintaining proper hygiene and sanitation.This all has to be checked before consuming water from the particular water unit. A detailed study on the bacterial infection can be made by growing the colonies of Streptococci using the infected water.

IV. CONCLUSION

Awareness about the unhygienic conditions of the water filtration units have to be made as this water is supplied to functions, Houses, Educational Institutions, Hospitals and almost all the offices and Departmental stores. Though not all the people are susceptible but persons who have low immunity are bound to be affected by consuming this water.

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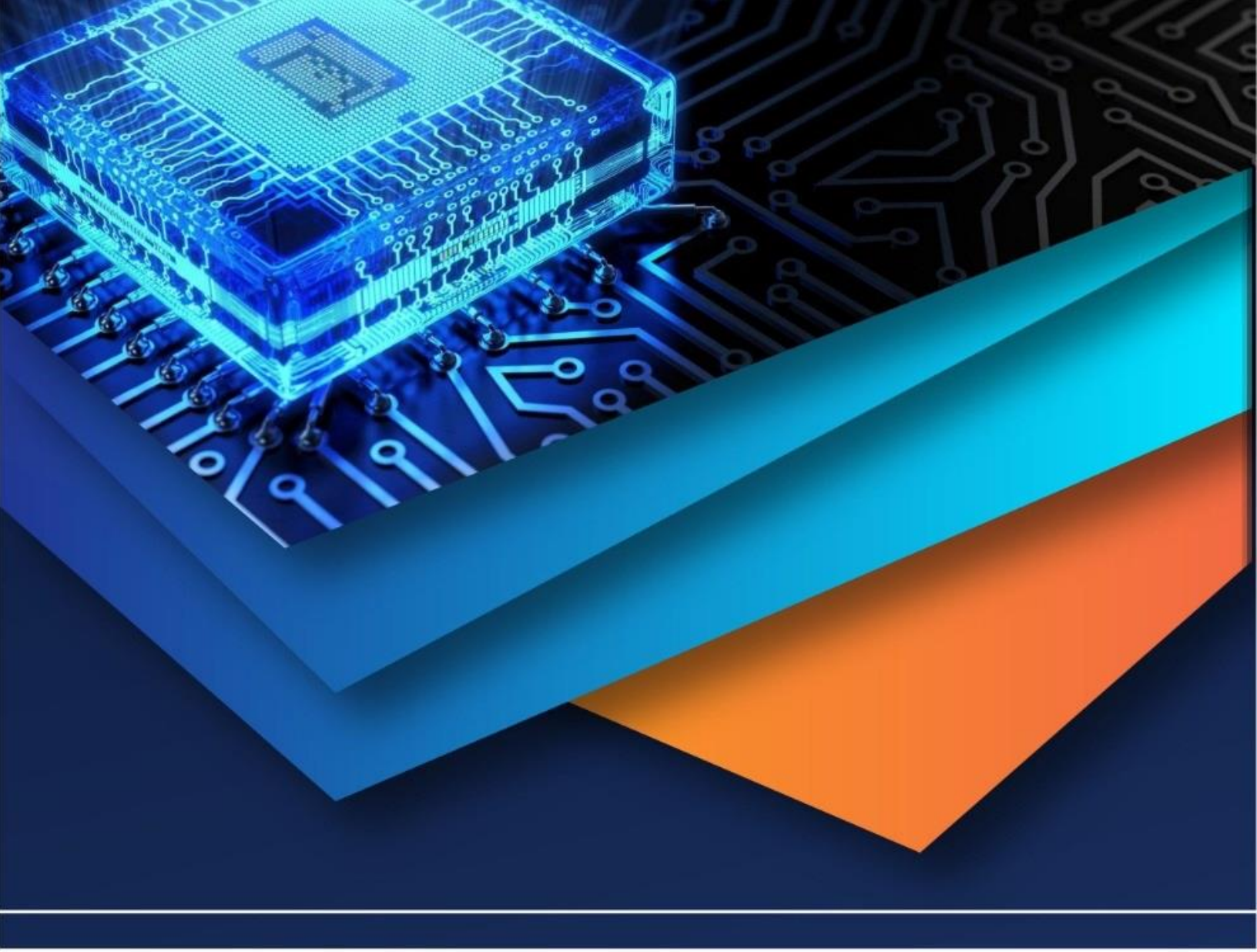

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