A STUDY OF BACTERIA LYING ON DISEASES BLOWN UP USING DATA CLASSIFICATION

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ABSTRACT

Microorganism makes the human body with many bacterial infections. To tolerate the sequence and its terminology needs a thorough knowledge to mine the dependency requirements in a proper way. Terminology can be learned and protected by the medical experts in a proper way. The middle man does not know the future as well as how to prevent from the bacterial infections. Data classification is required to fissure the dependency based on diseases from the microbiological test applied. A deep knowledge is survived to analyze the bacterial infections based on diseases affected to the human being. Sequence analyzer needs to fulfill the knowledge to apply mining based on the mindset altogether related to bacteria and diseases affected to the human being.

KEYWORDS: *Bacterial Infection, Data Classification, Diseases Affected, Sequence Analyzer*

I. INTRODUCTION

Now-a-days, UTI (Urinary Tract Infection) is the major issues for all human being even to the children. Generally it happens because of the lower level of water content in the human body. Many Researchers found that, UTI is affected highly to the Women than men. More than 81.1 million people visiting the doctor every year as a common type on Urinary infection.

Bacteria are tiny, single-cell organisms that live almost everywhere. Bacteria live in every temperature and position on earth. Some are in the air while others subsist in water or soil. The word "bacteria" has a harmful implication, but bacteria actually perform many imperative functions for organisms and in the atmosphere.

In General, UTI based infection will be very harmful and provides the issues in Kidney and ureters (upper UT). Especially for Women it will affect the bladder (infection on bladder called as cystitis) and urethra (lower UT). Even then it can be identified by some cause of symptoms and prevented within 2- 3 days. General home remedies and awareness is not taken by the current generation, this is due to lack of Knowledge on the field or working pattern with stress and soon. In General, Sign of the UTI Infection are:
- ✓ A burning sensation or pain when you urinate
- ✓ Feeling like you need to urinate more often than usual.
- ✓ Feeling the urge to urinate but not being able to
- ✓ Leaking a little urine

✓ Cloudy, dark, smelly or bloody urine
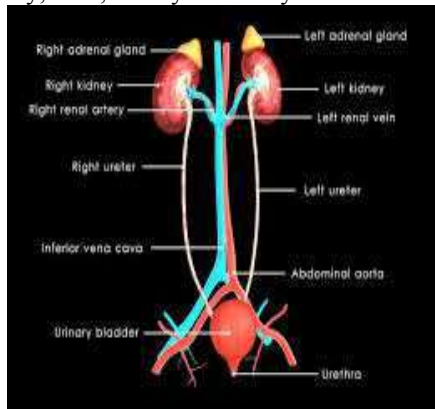
Figure 1: Anatomy of Urine system
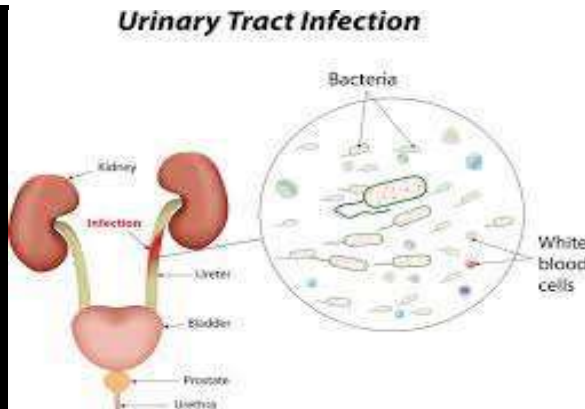
Figure 2: UTI infection

II. PROBLEM STATEMENT

The main problem stated is to identify the bacterial infection affected based on the diseases with multiple parameter on sequence analysis dependency based on pathogens test. Bacterial infections can be caused with many reasons in human being life; general awareness is required to shortlist the query and to protect from bacterial infections. Classification is applied based on the bacteria, and diseases which are affected to the human being. Pathogens are identified based on age, gender; diseases affected related to organ, UTI results. Problem statement is stated to identify the diseases affected with bacterial infection by applying the classification rule as it vary from one individual to another in the real life.

III. IMPLEMENTATION ANALYSIS

Implementation can be analyzed by the symptom and by testing the urine samples. The Common Symptoms of a UTI Infection are:
✓ Strong and frequent urge to urinate
✓ Cloudy, bloody or strong-smelling urine
✓ Pain or burning sensation when urinating
✓ Nausea and vomiting
✓ Muscles aches and abdominal parts
✓ Fever –difficult.

UTI Can be affected based on the organ are bladder,urethra,kidney and ureters.As such bacterial infections as well as the symptoms also varies based age, gender and the part where the bacteria blown up. The data classification of the infection is priorities based on the infections affected to the human being, where the symptoms arise as on with the possible features.

The data related to UTI Infection are conducted as follows:

UTI Affected Area	Possible Cause Symptoms	Possibility for the Cause of Bacteria	Test
bladder	✓ experience low fever , urinating more often than usual(frequency), ✓ foul-smelling urine , a frequent sensation of having to urinate(urgency), ✓ Cramping or pressure in the lower abdomen and lower back.	Escherichia coil	white blood cells, red blood cells, nitrites, bacteria

urethra	men:
	  ✓ burning sensation while urinating , itching or burring near the opening of the penis,
	  ✓ presence of blood in the semen or urine,
	  ✓ discharge from the penis;
	
	Women:
	  ✓ more frequent urge to urinate discomfort during urination ,
	  ✓ burring or irrating at the uretharal opening ,
	  ✓ Abnormal discharge from the vagina may also be present along with the urinary symptoms.
		neisseria gonorrhoeae, chlamydia trachomatis ,mycoplasma genitalium	HIV, Syphillis

kidney infection	✓ upper back and side pain, ✓ high fever, ✓ shaking, ✓ chills, ✓ fatigue and mental changes , ✓ burning or pain when you pee, ✓ constant urge to pee, even though you just went , ✓ cloudy or bad smelling urine, ✓ pain your lower belly, ✓ peeing much more often then normal,	E.coli	urine analysis, urine culture , ultrasound or ct
ureters	✓ injuries, ✓ ureteral stones, ✓ reflux	E.coli	urine analysis, urine culture , ultrasound or ct scan

Table 1. Data Classification on UTI Infection
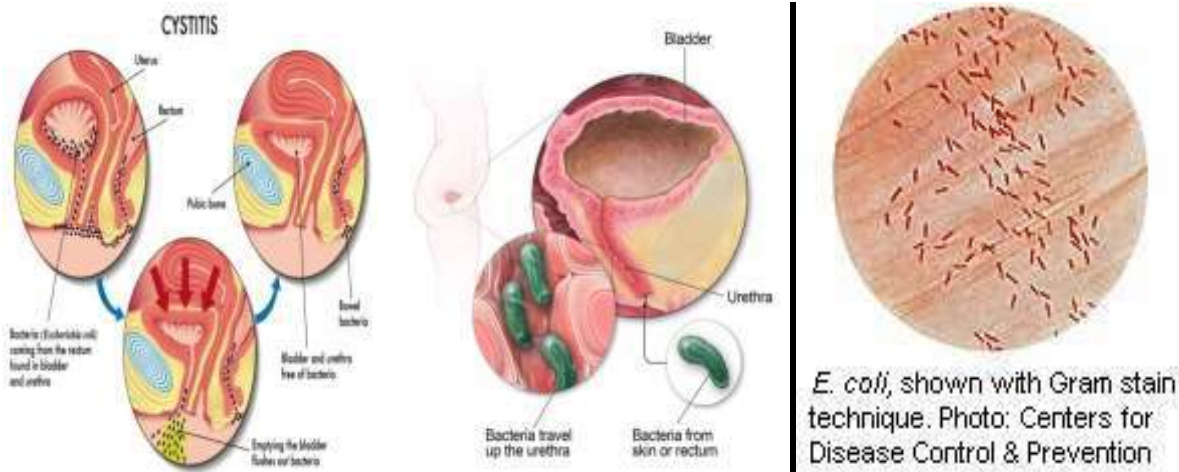
Figure 3: Infections on Cystitis   Figure 4: Bacterial infection on bladder   Figure 6:E.coli detection

IV. IMPLEMENTATION RESULTS:

Research implied towards this process can be descriptive analysis, studies are survived based on the UTI affected part and related to the symptoms applied to an individual as tested from the medical report. Information gathered is fine tuned to get a quick solution to prevent the human on identifying the UTI infection.
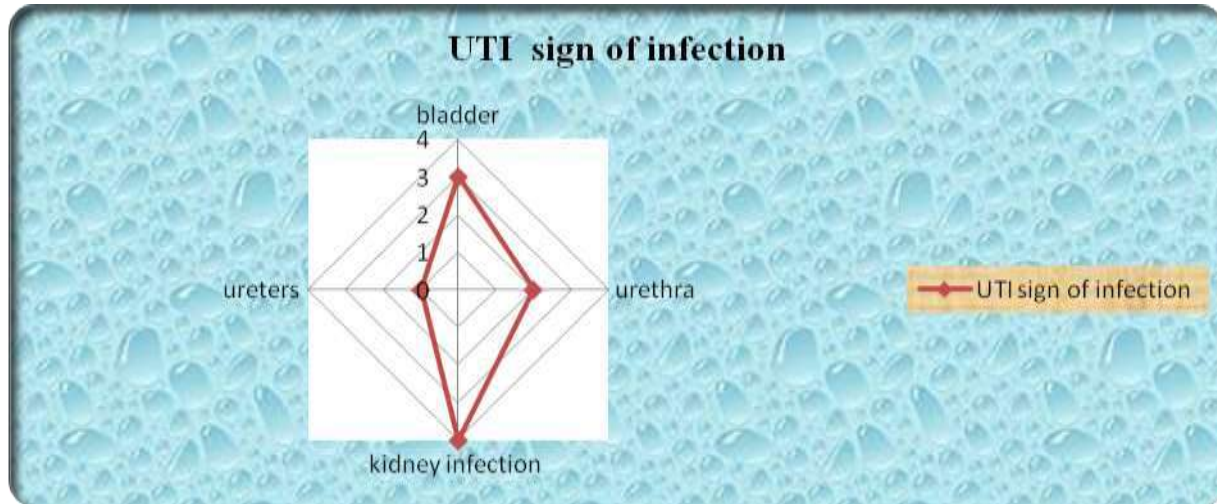

Figure 6: UTI Sign of Infections Affected

V. CONCLUSION

From the study of bacteria survival, related to UTI infection supports for data classification terminology in data mining. Data classification supports to fine tuned the data based on the accordance of infections affected to the part of the UTI in elaborated manner. With the multiple parameter of sequential analyzer on a progression manner, the survive shows the sign of symptoms is highly forced in an order as kidney, bladder, urethra and ureters. In future, prevention and risk factors strategies are planned to survive with much more taxonomy.

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