

CHAPTER- 24

Louis Pasteur

In ancient times, if a man happened to be bitten by a mad dog, he was taken to a blacksmith for treatment.

The blacksmith would take an iron rod, heat it on the burning coal till red hot and burn the patient's wound with it. In very rare cases would the patient survive. Normally this doesn't happen and neither the patient nor the disease remains. Louis Pasteur had also seen blacksmith treating such patients in his village. He would tremble with fear, everytime he saw this.



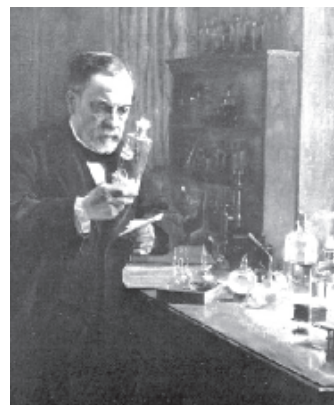
Find out from elderly people, in what other ways were people bitten by a mad dog treated? Write about it.

Louis Childhood

Louis Pasteur was born on 27th Dec., 1822 in France. He obtained his primary education in his village school. He was sent to Paris by his father to obtain a degree in teacher's training. Louis could not adjust himself in Paris for he would always miss his house, village and parents.

He fell sick and returned home. After recovery, he was sent to college in another city. There he studied science.

Earlier people believed that decayed objects were a birth place for germs and bacteria. After repeated experiments, Louis proved that this line of thinking was wrong. He proved that decayed things have no strength to form bacteria/germs. On the other hand, it is the bacterial/germs present in the air that enter into flesh, fruits, vegetables etc. and decay them.



Do people in your village/town also believe that decayed objects produce place for germs/bacteria?

He wanted to invent the cure to the disease caused by the biting of a mad dog. For this, he collected a number of mad dogs in his laboratory. He carefully studied the germs present in their body and conducted experiments on them. His own life was in danger because of these mad dogs. One day, he happened to swallow the poisonous saliva while sucking a mad dog's saliva with a glass tube. But this did not deter him from going ahead with his experiments.



You must be knowing that inoculation (vaccination) is a preventive medicine which is given to a person to help prevent the occurrence of that disease. Like tetanus and polio drops. Small number of germs are injected into human body. The red cells present in the body, fight the germs and

develop immunity against them. In future, if ever polio germs attack our body, these cells fight out these germs and protect us from diseases.

Pasteur experimented on rabbits using minimum number of germs present in a mad dog. This medicine was again used on mad dogs. He conducted experiments for almost three years. By the end of three years, he had approximately 50 dogs of different breed and age, in his laboratory. He had freed these dogs from rabies.

Should man be given the same inoculation? If yes, then what should be the dose of this medicine? These questions were troubling Pasteur. But, he could not find an answer to it till he experimented on humans.

As you all must be knowing, a mad dog is very dangerous. When it bites, a person does not get to know anything for 2-4 days, but the poison gradually spreads in his body. He experiences headache and talks too much. His thirst for water grows rapidly. He wants to drink water but cannot gulp it. He first experiences stiffness in his neck and later in his entire body which is followed by death.

14 bitemarks by a dog

A few people brought an 8-9 years old child who had been bitten by a mad dog at fourteen places. His condition was serious.

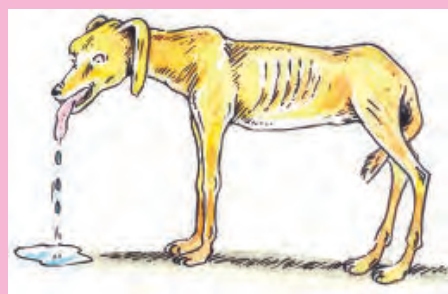
Louis got the child examined by two different doctors. Everybody thought he would die without treatment. Then Louis decided to experiment his newly invented vaccination. On that very evening the boy was given the first dose. Then he gave twelve more doses for nine days that followed.

The boys showed signs of recovery within a few weeks. After three months he was absolutely fine. The news of the recovery of the boy spread like wild fire in the whole world. This made Louis Pastur very famous.



What should you do if bitten by a dog?

If a person is bitten by a dog, it is most important to see that the dog's saliva has not come in direct contact with that person's blood. If yes, then it is necessary to find out if the dog is mad or not. If its a stray dog and has not been injected for anti-rabies and has run away, then it is necessary for the person to have the injection. These injections should be started immediately.



In case of a pet dog, or if the stray dog has been caught, it is necessary to chain the dog for 10 days and observe carefully. In these 10 days, if the dog shows signs of abnormal behaviour or falls sick, it should be considered mad. In this case, the person bitten should start taking injections.

If the dog shows no signs of abnormality and sickness, then it should be let free. The person bitten should not worry. Another important thing is that the bitten place should be immediately cleaned with water, soap and an injection is to be taken.

What do you do if a mad dog bites a person? Find out.

What are the symptoms found in a person bitten by a mad dog?

What advice would you give to a person bitten by a mad dog?

What have We Learnt?

Oral

1. How will you know whether the dog is mad or not?
2. To which country did Louis belong to?

Written

1. How was a person bitten by a mad dog treated in older days?
2. Why was Louis called the 'Saviour of Mankind'. What do you understand by it? Do you agree with what was said about Pasteur ?
3. Explain, what is inoculation.

Find Around You?

1. Go to a nearby hospital and find out if anti-rabies injection is available or not?
2. Find out the different medicines given to a person bitten by a mad dog.
3. You have read here how Louis Pasteur discovered the rabies vaccination. Read and make a report of any other scientists and his discovery.

