smelling gas is produced. Mice and guinea-pigs die within twenty-four hours of inoculation, locally a spreading oedema is produced.

The predisposing factors as diabetes, chronic nephritis, bad nursing and poor hygiene are also favourable to the inflammation, which later cause gangrenous stomatitis.

Trophic Lesion. May possibly be a direct cause of gangrene, but more often predispose gangrene by diminishing the resistance of the tissues to other lethal influences.

To arrive at diagnosis of a case of gangrene, the following points should be attended to:—

1. Whether the variety of gangrene is "Dry or Wet"?

2. The condition preceding and leading to gangrene, as shown by the state of the parts adjacent to the gangrenous area. This may be balanced and cold with feeble arterial circulation, or congested and oedematous or inflamed.

3. The extent of gangrene, especially whether it has spread beyond the part originally affected.

4. The condition of the main vessels of the part and of the body generally.

5. The state of the nerves, especially of anaesthesia, of loss of reflexes, and sting.

6. General condition of the patient, particularly his age, occupation, the state of his heart and circulation, presence of sugar or albumin in the urine and evidence of specific intoxication.

7. History of injury, its nature and severity, and its relations to the occurrence of a case of gangrene, both as to time and seat of injury.

8. Microscopic examination of a part.

If the serum from the part is examined under the microscope, it shows presence of specific bacteria, i.e., anthrax or gangrenous.

Proper study of the facts quoted above and full examination of the parts can show cause of gangrene evident, but the following three categories are also helpful for knowing the real consequences of the disease:

(a) Traumatic Gangrene.
(b) Infective Gangrene.
(c) Spontaneous Gangrene.

(a) Traumatic Gangrene: It is characterised by the time of its occurrence and extent of tissue affected. It happens quickly after a severe injury and is limited to the injured part.

(b) Infective Gangrene follows an injury or a source of infection like scratch, ulcer, exposure to cold. In this form more pyogenic organisms are found.

(c) Spontaneous Gangrene is one with slow progress, no vitality of neighbouring parts, well marked prodromata. If we follow the heading and symptoms of the patient, it will not be difficult to know this disease, its nature and causes. We can very well sum up septic gangrene as:

"When living tissues become the seat of septic or infective process, the bacterial toxin induce such excessive leucocytosis and profloration of connective tissue cell that extensive stasis follow by thrombosis results. Continued action of toxins, aided by the loss of blood, leads to necrosis of the tissue cells, which undergo changes."

Twenty cases of gangrenous stomatitis have been seen by me during the period of three years. The patients belonged to both the sexes and of various age groups, and came from backward areas. Their economic status was very low and, consequently, they were mostly anaemic. Majority of the patients were children between the age of six and four years. Some of the children were motherless, in which case the symptoms were very acute, as a father is unable to properly look after
the child as a mother does. An interesting case was a peasant woman of forty years of age from Pishin. She had four children, and had given birth to the fifth prior to the disease. She had tooth-ache. The cavity in her tooth was causing pain. She applied some local indigenous material, but no relief followed. She went to a shrine for her relief and later called on a faqir, who advised the application of warm dung of the cattle. After two days of this application, left side of her cheek was destroyed. There was intense odour, pus was seen, the lower part of her affected side of the eye was inflamed. She was weak and worried too. All of the buccinator, sygomatic major and minor, masticatory muscels were out. The affected part was neither warm nor bleeding; it had become devoid of any sensation. The maxillary bone was yellowish and some signs of necrotic materials were there. Teeth of the affected side were shaky and pus was seen at the root of the teeth. One tooth was curious; she had low temperature, loss of appetite and weight as well.

The part was cleaned and surgical incision was done to take away all the necrotic tissues. Cleansing was done with hydrogenperoxide and acrollvin dressing was given. She was put in a warm blanket in the Hospital and her general strength was supported by stimulant, nourishment, etc. She was also given broad spectrum antibiotics. Her teeth were taken away under slight anaesthesia without her knowledge of pain. She was given daily dressing locally and heavy antibiotics were given in order to clear her wound and make her healthy. Help of the microscope could not be had due to lack of laboratory facilities. Thus, the case had to be referred to a plastic surgeon for her need.

The second interesting case is of a female child of four years. She is also from this part i.e. Hindubagh. When she was brought to the hospital, she was very weak, debilitated, painful and depressed. On seeing the face of the case I found a mass of dead material which was full of bad smell, sloughy and soft on the left side. The line of separation was done to masticatory muscles, orbicularis oris, Alae nasi and sygomatic.

The infra-orbital foramen of the maxilla was seen. The patient was hospitalized and at once necrotic material with other dead tissues was cut away with scissors without any anaesthesia. The infected teeth were also taken away and dressing was given. Patient was given all the necessary treatment for her resistance and infection. The father of the patient stated that about eight days prior to this disease she had fever with shiver. Two days later, she had a small swelling with a scar in centre. Local indigenous material was applied and such condition happened after four days. She had a low temperature at the time of hospitalization.

All the other cases, which have come to this hospital, have been from far-off areas, with little knowledge of hygiene and from the bottom strata of our socio-economic organization. This large number of humanity who were victims of this dreadful disease, i.e., cancerum oris, had had a history of some fevers previously as typhoid, malaria or scarlet fever. Some cases gave a history of infective fevers as measles, etc. Almost all the cases had a tooth trouble prior to this disease. They acted upon the advice of quacks and other unqualified persons and thus they lost their facial aesthetic and got the infection as a result of bacterial putrefaction. The cases, on their arrival at the Hospital, have been promptly attended to. Nothing substantially could be done for the missing parts of their faces due partly to the lack of cooperation on their part, and partly owing to the absence of a specialist in the field of plastic surgery.

References

4. Surgical Pathology (By Illingworth and Dick).
5. Elements of Surgical Diagnosis (By Sir Alfred Pearce Gould).
6. Dental Pathology by (Store).
7. Dental Surgery.
8. The Dental and Other Surgical Magazine.