

A Case of Necrotic Stomatitis

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A necrotic disease in the oral cavity is clinically rare and often fatal. This report describes such a case of a 16 year-old boy who died of necrotic stomatitis of the soft palate. We believe it to be of interest because of its unknown cause and the diagnostic problem it presents.

REPORT OF CASE

History — a 16 year-old high school boy was good in health until Aug. 7, 1966, when he developed sore throat and high fever associated with chill. At that time, he was seen by an internist living near by who made a diagnosis of common cold, and treated with antibiotics with good effects. About twenty days later, he again noted a similar symptoms as initial episords and soon developed hoarseness, bilateral hearing loss, some sensation on the pharynx, nasal obstruction and dry mouth. For the following ten days, he was unsuccessfully treated with variety of antibiotics and antitoxin for dyphtheria. He was referred to Otolaryngology Service of National Shimonoseki Hospital for evaluation of his pharyngeal condition. However, his symptoms became progressively worse. In Sept., 1966, the patient was referred to our clinic for precise examination and was hospitalized. His past and family histories were noncontributory.

On physical examination he was emaciated without distress. His face looks anemic, but conjunctive palpabrea was not so anemic. His weight, 26kg; body temperature, 37.3 °C; pulse rate, 120 per minute being regular and of good tension and blood pressure, 98/52mmHg. The chest was normal to percussion and auscultation. On abdomen the spleen was slightly enlarged, being relatively firm. Knee jerk was hypoactive. Ankle jerk was normally eliciated. There was neither rash nor edema. The patient was pyrexic. Bilateral cervical lymphnodes were palpable. The submaxillary lymphnodes were enlarged in the size of large beans. The axillary lymphnodes were palpable, but not so large. Inguinal lymphnodes were not so enlarged either.

The tongue was coated slightly with whitish fur. The soft palate showed apparently irregular and nodular tumor, the surface of which was covered with

whitish gray necrotic vegetations unassociated with noticeable hemorrhage, extending to both palatal tonsils and the retropharyngeal wall. The uvula had already disappeared. The surrounding area of necrotic region was red (Fig. 1). The nasopharynx was occupied by this necrotic materials. The tympanic membranes were retracted and gray in color bilaterally, but no perforation was noticeable. Examination of the nostrils revealed an enlarged inferior turbinate on the right side, covering with whitish membrane, but no mass noticeable. The left sided nostril was relatively clear, the epiglottis was normal shaped and clear, and the true cords were not inspected.



Fig. 1. The soft palate in necrotic change.

Laboratory Findings on Admission—Chest X ray film was essentially normal. E.C.G. was within normal limits. The urinalysis was negative for protein and the sediment was unremarkable. Audiogram showed a 40 db loss on both sides. Culture of the lesion revealed many *Streptococcus* groupae and *Staphylococcus aureus*. Examination of the blood disclosed 11.5g/dl hemoglobin, 381×10^4 red blood cells, and 7200 white blood cells with a differential count of 67 percent segmented neutrophils, 2 percent nonsegmented neutrophils, 20 percent lymphocytes, 10 percent monocytes, 1 percent eosinophils and 1 percent basophils. Thrombocytes were sufficient in number, being 80 per 10 oil immersion fields. Hemorrhagics study was essentially normal. Biopsies of the lesion obtained were rather friable, but not bled. Histological reports were chronic inflammation (Fig. 2).

Progress — The patient's condition was mildly septic as evidenced by the temperature chart (Chart 1). During the first three days after admission, the patient received only repeated oral irrigation with boric acid and oxydol solution with no other treatment. On the fourth day, blood transfusion was instituted

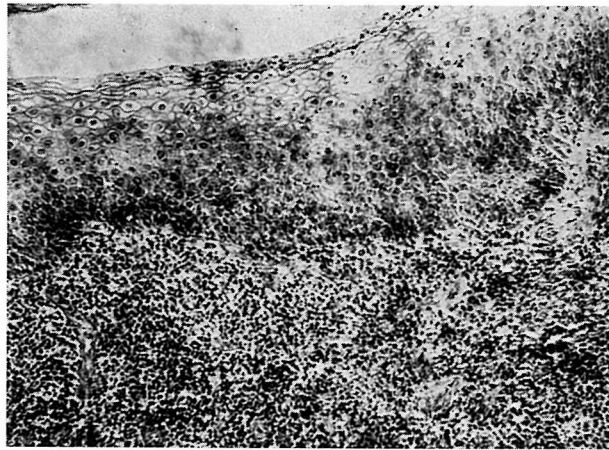


Fig. 2. Inflammatory cells are scattered in this mass. No atypical epithelial cells are found and there is no evidence of malignant disease; hematoxylin and eosin stain. $\times 100$

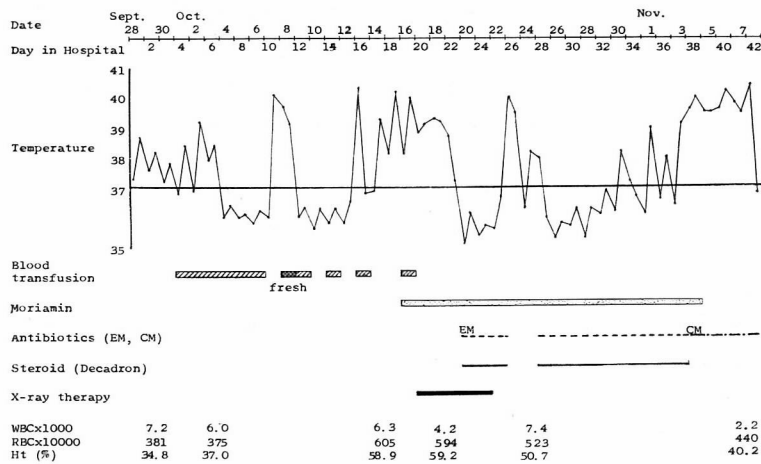


Chart 1---Clinical Course

with the administration of a total of over 2100 cc and a period of 16 days, during which a transient fever rise developed at the time of using of fresh blood. Three days later the temperature returned to normal, but no change in his local condition. On Oct. 3, culture of blood was negative. On the other hand, the isolation from lesion of a number of *Candida albicans* was reported, except for previous reports. Examination of bone marrow showed normal myelogram. Culture of sputum was negative for *Tubercle bacilli*. The serological examination on Oct. 11, revealed increased ASLO value, and hemolytic streptococcal infection was suspected. On 15th day the patient had a rapid rise in temperature. Since

that time he began to have abdominal pain, associated with nausea. In view of the severity of his symptoms, intravenous drops of Moriamin of 500cc daily was negative and urinalysis was also normal. On Oct. 17, a second blood culture was sterile. Paper electrophoresis of serum protein on Oct. 18 demonstrated increase in α_1 and α_2 globulin. On 30th day radiation therapy was done with a total doses of 122 X-ray for 5 days, but it was not so effective. On 23th day antibiotic and steroid therapy performed and was continued for 11 days, since it appeared to be the only medication that controlled his septic temperature. The total doses of Erythromycin and Decadron were 14mg and 30mg, respectively. The response to this medication was dramatic. On the following day the symptom subsided slowly and his condition seemed to be satisfactory. Seven days later pharyngeal vegetation almost disappeared. Culture of the lesion on Oct. 22 obtained was the same findings as those previously reported. Another sternal marrow on Oct. 24 was essentially normal myelogram. However, 10 days after the beginning of this therapy, he began to have a rise in temperature, general fatigue and enlargement of the submaxillary lymphnodes on both sides. Local condition became more severe. On 40th day he became extremely ill and slow to response. On Nov. 7, urinalysis revealed albumin of 100mg and many bacteri. Examination of peripheral blood resulted as follows; the leukocyte count was 2200 and the erythrocyte count, 440×10^4 , thrombocytes were 18 per 100 oil-immersion fields. In spite of careful management, he expired in 42 days after admission.

SUMMARY

A case of a 16 year-old boy who died of necrotic stomatitis of the soft palate is presented.

Table 1. Causative factor of necrotic oral disease

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| 1) Virulent infection or weak resistance of the body
(typhoid fever, dysentery, scarlet fever, influenza, pharyngeal diphtheria, pharyngeal syphilis, pharyngeal tuberculosis, noma, actinomycosis and Vincent's angina etc.) |
| 2) Blood disease
(pernicious anemia, leukemia and agranulocytosis etc.) |
| 3) Mixed infection following with cachexy
(neoplasma, severe tuberculosis and dyspepsia etc.) |
| 4) Chemical poisoning
(mercury and arsenic etc.) |
| 5) Idiopathic |
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