Hemangioma with Phleboliths on the Floor of the Mouth

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The hemangioma with Phleboliths in the oral cavity is very rare in occurrence. In the literature of Japan, ten cases (1)-(10) are reported. Especially, the cases on the floor of the mouth are only two among these cases.

In this paper, a case of hemangioma with phleboliths on the right sided floor of the mouth is reported.

REPORT OF A CASE

The patient, 54 years old wife, was admitted to our clinic with complaint of a mass on the right floor of the mouth on October 19, 1966. Before admission she had been pointed out a swelling on the right submaxillary area by her friend about 3 years ago. Soon later, she had noticed a thumb head sized mass on the right floor of the mouth. About six months later, she had been seen by some otologist who had made a diagnosis of salivary stone on the right floor of the mouth and had performed on removal of two stones. After this operation, she had daily been performed on puncture of the wound with drainage of about 5 cc. bloody discharge for one week because the swelling on the right floor of the mouth had not been disappeared.

Recently, the mass on the right floor of the mouth had grown with complaints of slight disturbance of the tongue movement and foreign body sensation in the mouth.

In her past history, she had been performed on total extirpation of uterus because of myoma uteri about 7 years ago.

On admission, she was a small stature and well nourished woman. The lungs, heart and abdomen were normal. On local examination, there was a soft, hen egg sized tumor on the right floor of the mouth, surface of which was blue reddish in color with capillary engourgement. It had remarkable fluctuation. It, as a whole, was elastic soft, but a hard red bean sized mass was palpable near the frenulum of the tongue. The tumor extended to the right submaxillary and submental area. The movement of the tongue was disturbed with the taste sensation. The ears are normal, except a scar on the right eardrum. The enlargement of the bulla ethmoidalis was visible in each nostril. The pharynx and larynx were normal. X-ray of the upper neck revealed three round salivary stone-like shadows just below the corpus mandibulae on the right side (Fig. 1 and 2). The sialography of the right submaxillary gland showed well appearance of the submaxillary gland without stenosis on the Wharton's duct, but the right submaxillary gland was displaced to the inferior and posterior portion. Peripheral blood examination revealed normal. Bleeding and coagulation times were within normal limits. Urine examination for protein and sugar was negative. The serologic test for syphilis was negative.



Fig. 1. Roentgenogram of the lateral view showing phleboliths.



Fig. 2. Bite-film roentgenogram.

She was performed on removal of the tumor on the right floor of the mouth under the diagnosis of ranula or salivary stones on the first hospital day. After infiltration anesthesia of 0.5 % Procaine solution beneath the mucosa over the tumor, an incision was made about 3 cm. in length at the top of the tumor. The capsule of it was exposed carefully. The tumor was dark reddish in color and grape shape in appearance. The Wharton's duct was intact with no presence of the salivary stone. There was the atrophic sublingual gland over the tumor near the corpus mandibulae. The tumor and the sublingual gland were removed and the stump of the Wharton's duct was stitched to the oral mucosa near the midline. Postoperative course was uneventful, except slight disturbance of the tongue movement and slight swelling of the right submaxillary gland.

The specimen was sent to pathological department (Dr. Uchino) for study. The removed tumor measured 5.0 by 4.5 by 2.8 cm. in diameter. It was dark reddish violet in color and grape shape in appearance (Fig. 3). It, as a whole, was elastic soft, but there were eight stone-like small masses in it (Fig 4).



Fig. 3. Photograph of the removed hemangioma.



Fig. 4. Photograph of the phleboliths.

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The cut surface of it appeared spongy with bloody discharge on gross section. Microscopically, the sections showed small or large cavities which appeared irregular in shape and were lined with a layer of the endothelial cell. The cavities were filled with red blood cells. The septal wall consisted of the thin connective tissue or proliferated connective tissue with muscle fibers beneath the connective tissue layer. Histological findings of the phlebolith mainly showed to compose of the circular stratified fibrous tissue with carcification, and partially organization of the thrombus (Fig. 5). Histological diagnosis which was reported by Dr. Uchino of Department of Pathology was hemangioma simplex with phleboliths.



Fig. 5. Photomicrograph of the phleboliths.

COMMENT

The benign tumors on the floor of the mouth is listed as; hemangioma, lymphangioma, lipoma ranula and dermoid cyst. The latter two are not so rare in occurence and are similar in characteristics to the former true benign tumors, so that hemangioma, lipoma and other benigh tumors on the floor of the mouth are often diagnosed as ranula and dermoid cyst. In this case, the tumor was first diagnosed as salivary stones in consideration of the position and characteristics of the tumor and stone-like shadows found by roentgenogram of the submaxillary area. Stone-like shadow in and around the oral cavity is commonly revealed by the salivary stone. On the other hand, tooth in the dermoid cyst, carcification of the lymphnode and phlebolith, all in the oral cavity reveal the stone-like shadow. It is very difficult to differenciate the shadow of the phlebolith in and around the oral cavity from the shadow of the salivary stone. Tada⁴, Nagao⁵ and Matsuda⁷, in the similar case, reported that they first made a diagnosis of salivary stones. When the stone-like shadow is found by the roentgenogram of

the jaw and upper neck, by means of sialogram it is important to determine whether the stone like shadow is within or outside the salivary gland and duct. In addition, it is essential to remember that the salivary stone-like shadow is revealed by the phlebolith and the carcification of the lymphnode. Concerning the diagnostic value of the phlebolith, Davis¹⁰, Fabian¹¹ and Sawano¹ previously reported that the deep hemangioma and hemangioma in the muscle and bone could be diagnosed by the roentgenogram of the shadow of the phlebolith. Schwartz and Salz¹² reported a case of hemangioma with phleboliths in the masseter muscle which was found by the roentgenograph of the jaw.

SUMMARY

A case of hemangioma simplex with eight phleboliths on the right floor of the mouth which was found a fifty four years old wife is reported.

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