Hemangiomas are the most common masses of the major salivary glands in parotid glands in childhood particularly. They occur more frequently in the parotid gland and rarely the submandibular gland. Changes in blood flow dynamics within hemangiomas may induce thrombus formation and phleboliths. Cavernous hemangioma may lead to thrombophlebitis in major salivary glands in adults. To our knowledge, cavernous hemangioma of submandibular glands containing phleboliths in childhood has not been described so far in the literature. In this article, we report the first pediatric case of a cavernous hemangioma containing multiple phleboliths in the submandibular gland mimicking submandibular sialolithiasis in a seven-year-old boy.