

Solitary Fibrous Tumor of the Tongue: An Unusual Presentation Andrew P. Marks, DDS , Paige Collins, DMD One Brooklyn Health: Brookdale Campus



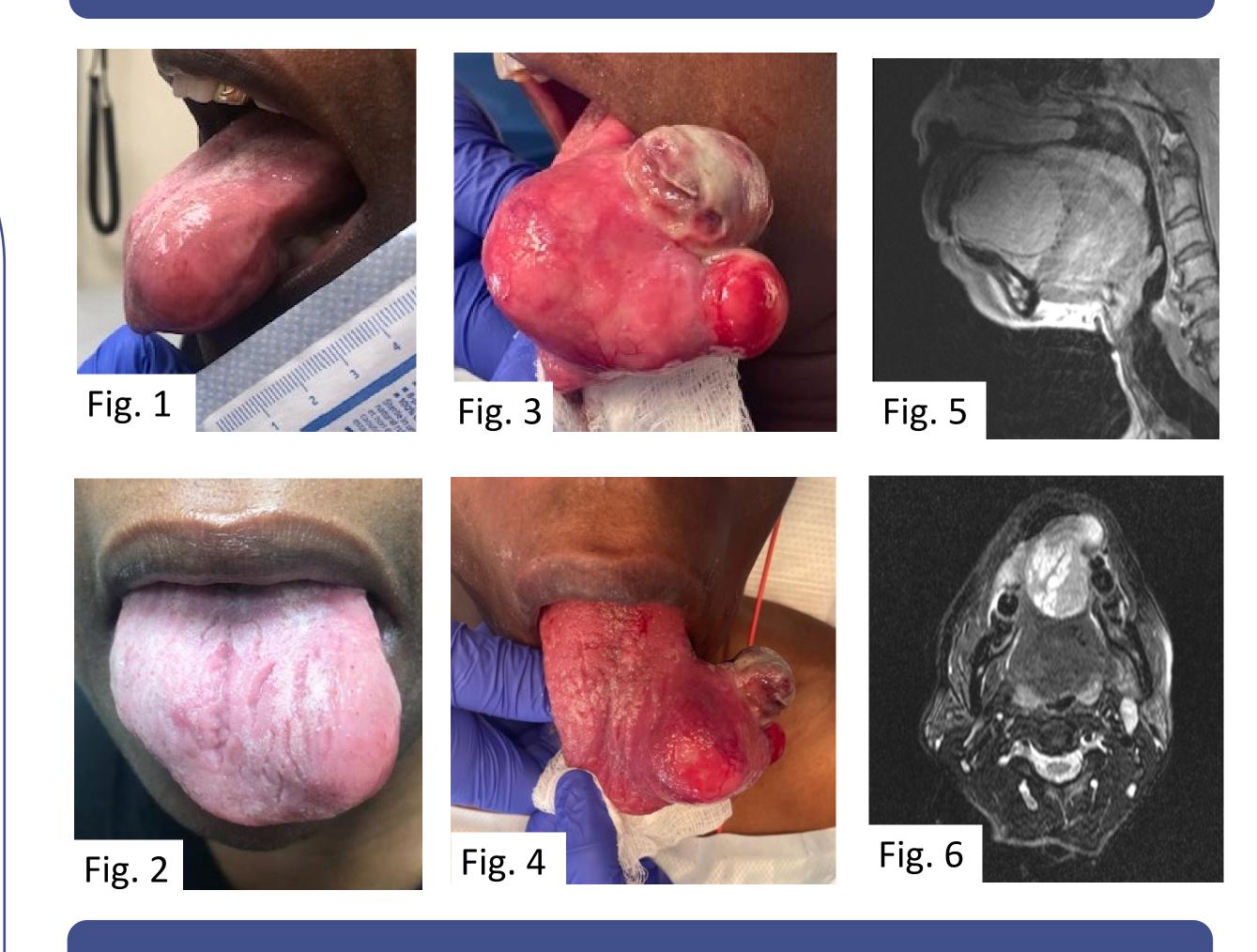
# INTRODUCTION

Solitary fibrous tumor (SFT) is a rare, soft tissue tumor of mesenchymal origin- first described by Klemperer et. al in 1931<sup>[4]</sup>. These tumors are typically of pleural origin, but have been reported in extrapleural sites, including, but not limited to, the pelvis, liver, pericardium and thoracic wall. SFTs are usually benign in nature. There have only been 150 reported cases of SFTs in the oral maxillofacial region since May 2019<sup>[7]</sup>.

## CASE REPORT

A 56 y.o. female with no significant past medical or surgical history presented to the Brookdale University Hospital Medical Center emergency room in July 2019 with a painless mass on the left side of her tongue. She reported biting her tongue a year prior and noticing the swelling slowly growing with time. On presentation, clinical examination revealed a 3cm x 4cm well-circumscribed, fixed mass on the left lateral border of the tongue. There was a small ulceration surrounding the mass consistent with trauma from dentition. This mass was nontender to palpation and non-pulsatile(Fig. 1 and Fig. 2). An incisional biopsy was performed under local anesthesia the following day in the oral-maxillofacial surgery department. Pathology report revealed a solitary fibrous tumor. MRI and excision of the tumor was recommended, but the patient failed to follow up due to a lack of insurance.

## PREOPERATIVE



This patient returned to the oral-maxillofacial surgery clinic in June 2021 reporting an increased size in the tongue mass, now causing difficulty eating and drinking. New clinical examination revealed a 4cm x 6cm well circumscribed mass with two additional exophytic masses(Fig. 3 and 4).

### INTRAOPERATIVE







## PROCEDURE

The patient's airway was secured via awake nasal fiberoptic intubation. The patient's mandible was subluxated to allow for full protrusion of the tongue. The tumor was excised, primary closure was obtained, and the mandible was reduced to preoperative position(Fig. 7, 8 and 9). Postoperatively, the patient had an improvement in speech and diet(Fig. 10). The patient was discharged the following day. One week postoperatively, there was minimal edema and full mobility of the tongue(Fig. 11). The final pathology report confirmed a solitary fibrous tumor.

#### DISCUSSION

SFTs in the oral-maxillofacial region have been found in the orbital region, nasal sinus, thyroid, larynx and major salivary glands<sup>[7]</sup>. This tumor is rare in the oral cavity itself and is most commonly found in the buccal mucosa or cheek<sup>[5,6]</sup>. There have only been 150 cases of SFTs in the oral cavity reported as of May 2019<sup>[7]</sup>. For our patient, this tumor was found on the lateral border of the tongue, which the patient presumed to be secondary to tongue trauma. Treatment for these tumors is excision with 5-mm margins for benign lesions or 1-1.5cm for malignant lesions<sup>[5]</sup>. Our patient had her tumor excised and it was found to be benign. She has since returned to the clinic for subsequent follow ups with a well-healed surgical site and full movement of her tongue.

# Fig. 7 Fig. 8



# POSTOPERATIVE





#### REFERENCES

1. Bruzzone, Andrea, et al. "Solitary Fibrous Tumor." Rare Tumors, PAGEPress Publications, 31 Dec. 2010, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3019599/.

2. Davanzo, Brian, et al. "Solitary Fibrous Tumor." Translational Gastroenterology and Hepatology, 21 Nov. 2018, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6286917/.

3. Dungarwalla, M M, et al. "Solitary Fibrous Tumour of the Tongue: A Series of Four Cases: The Journal of Laryngology & Otology." Cambridge Core, Cambridge University Press, 7 July 2017,

https://www.cambridge.org/core/journals/journal-of-laryngology-and-otology/article/abs/solitary-fibrous-tumourof-the-tongue-a-series-of-four-cases/48DAAFA1B383B982FF00458000323A29.

4. Klemperer, P. and Rabin, C.B. (1931) Primary Neoplasms of the Pleura. A Report of Five Cases. Archives of Pathology, 11, 385-412.

5. Marx, Robert E., and Diane Stern. Oral and Maxillofacial Pathology: A Rationale for Diagnosis and Treatment. Quintessence Pub. Co., 2012.

 Rodrigues, Renata-Miranda, et al. "Solitary Fibrous Tumor of the Floor of the Mouth." Journal of Clinical and Experimental Dentistry, Medicina Oral S.L., 1 Sept. 2017, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5650220/.
Shmuly, Tom, et al. "Oral Solitary Fibrous Tumor: A Retrospective Clinico-Pathological Study and Long-Term Follow-Up." Medicina (Kaunas, Lithuania), MDPI, 8 Feb. 2021, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7914433/.