Tuberculous ‘lock jaw’

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DESCRIPTION
A 23-year-old woman presented with history of facial swelling (right side) and inability to open her mouth (figure 1A) for 2 weeks. Physical examination was normal. Tuberculin skin test performed at another centre prior to referral to our facility had demonstrated 25 mm induration. CT scan (neck and thorax) was performed, which demonstrated bulky right side masseter muscle with necrotic areas (figure 1B) and necrotic appearing mediastinal lymphadenopathy. Ultrasound-guided aspirate from masseter muscle yielded thick cheesy pus. Staining for acid-fast bacilli was positive and culture grew *Mycobacterium tuberculosis*. Facial swelling and jaw opening recovered within 2 months of four drug antituberculous treatment. Tuberculosis (TB) of the masseter muscle is an unusual cause of trismus (lock jaw). The musculoskeletal system is involved in nearly 3% of cases of extrapulmonary TB, usually presenting as spondylitis, osteomyelitis or arthritis. Skeletal muscle involvement in TB is rare. Primary tuberculous myositis may mimic malignancy. Usually, a single muscle group is involved, and thigh muscle involvement is most commonly reported. Muscles are involved primarily by spread from contiguous sites followed by haematogenous route and rarely by direct inoculation. Paraspinal and chest wall muscles are the commonest sites for contiguous spread. Primary tuberculous involvement of the masseter muscle is unusual. TB of the masseter muscle is an unusual cause of trismus and sometimes the presentation may include a submasseteric abscess rather than primary muscle involvement. TB should be considered in the differentials of muscular disease in endemic settings.

Learning points
▸ Skeletal muscle involvement is an unusual presentation of musculoskeletal tuberculosis.
▸ Tuberculosis can, rarely, involve the masseter muscle and present as trismus.

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Figure 1 (A) Clinical image demonstrating swelling over the right jaw and inability to open the mouth. (B) CT demonstrating hypodense necrotic appearing areas within the right masseter muscle.