A 47-year-old man had a history of progressive mandibular swelling for 15 years and increasing quickly in size for 4 years. Physical examination revealed a hard immobile mass in the mandibular region, with multiple ulcers of varying sizes (Figure 1 A). The well-demarcated mass measured 20 cm × 12 cm. The patient had impediment of speech, salivation and poor oral hygiene, with defect of dentition in the mandible. Coronal CT showed a well-circumscribed expansile mass with multiloculated scrotiform osteolytic lesions in the mandible, with linear and patchy calcification and ossification. CT 3D reconstruction revealed the mandible appeared honeycombed. On T1W and T2W MR images, cystic low density components on CT appeared high-signal, while calcification and ossification appeared low-signal.

Key Words: Mandible; ameloblastoma; computer tomography; magnetic resonance imaging

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Figure 1 A: Physical examination reveals a large hard mass in mandibular region with multiple ulcers on the surface; B: Coronal CT in soft tissue window shows multicystic oestolytic lesions in the mandible; C: Axial CT in a bone window shows linear and patchy calcification and ossification in the mass; D: CT 3D reconstruction reveals honeycombed mandible; E, F: On T1W and T2W MR images, cystic low-density components on CT appear high signal, while calcification and ossification appear low signal; G: Macroscopically, the tumor section appears honeycombed, with both cystic and solid components; H: Microscopically, the tumor is composed of ameloblast cells and fibrous tissue.