## LETTER TO THE EDITOR

## OPEN ACCESS

# Rare Epithelioid Sarcoma of the Scalp Involving the Left Parietal Bone

Sir,

Epithelioid sarcoma (ES), a rare soft tissue tumour of unknown origin, occurs in young people. Moreover, it is more common in the distal extremities, especially the hands or forearms, but rarely originates in the head. This tumour is slow-growing and presents as single or multiple hard nodules with indistinct borders. It is mostly painless and mainly involves the superficial or deep subcutaneous soft tissues, especially the fascial layers, tendon membranes, and tendon sheaths.<sup>1</sup> The rare case of ES of the left parietal bone of the scalp is discussed below.

A 26-year woman was hospitalised for 15 days due to a mass on the left parietal scalp associated with pain. She reported that three years ago a mass, about the size of a soybean, was found in her left parietal bone with mild pain, which gradually disappeared after oral antibiotics, and that the mass recurred and slowly increased in size over the last two years. Oral medication or intravenous fluids did not reduce the size of the mass, and a CT scan showed a subcutaneous mass on the top of the left side of the head, with increased bone mineral density in the adjacent skull (Figure 1A).



Figure 1: (A) CT scan showing a subcutaneous mass on the top of the left side of the head, with increased bone mineral density in the adjacent skull. (B): The size of the removed mass was  $3.8 \times 3.5 \times 0.5$  cm. (C and D): On microscopy, the epithelioid cells were distributed in nests and clusters with extensive desmoplasia. The tumour cells were rich in the cytoplasm, with large, vesicular nuclei, and prominent nucleoli.

Under general anaesthesia, the subcutaneous left parietal mass was resected, and haemostasis was secured with an electrocoagulation knife. The mass was completely excised with a scalpel to remove the necrotic tissue and envelope around it. The size of the mass was  $3.8 \times 3.5 \times 0.5$  cm (Figure 1B). On microscopy, the epithelioid cells were distributed in nests and clusters with extensive desmoplasia, and the cells were rich in the cytoplasm, with large, vesicular nuclei, and prominent nucleoli. There were scattered areas of necrosis (Figure 1 C,D).<sup>2</sup> Immunohistochemistry showed CKp (+), CD34 (+), Ki-67 (30% +), ERG (+), and Vimentin (+). Supplementary immunohistochemical results from the Cancer Hospital of the Chinese Academy of Medical Sciences showed INI1 (-), AE1/AE3 (3+), BRG1 (+), PD-L1Neg (-), and PD-L1 (22C3) (CPS <1). In summary, the final diagnosis was made of ES, the classic type.

Surgical resection, chemotherapy, and radiation therapy are all options for the treatment of ES,<sup>3</sup> which can be combined with heavy ion gas pedal treatment when the result is not good.

#### **COMPETING INTEREST:**

The authors declared no conflict of interest.

#### **AUTHORS' CONTRIBUTION:**

PZ: Drafted, revised, and edited the manuscript.

WX, GZ: Performed data collection, analysis, and interpretation.

CZ: Performed data collection.

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