Mesenchymal Hamartoma: a Review of Literature

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Abstract

Mesenchymal Hamartoma is a rare, benign osseous tumor that typically involves the rib cage and presents during the first year of life. There is a case of this tumor originating in the cervical spine, described in literature. I document a brief literature review. In this review, there are not figures and outcomes.

INTRODUCTION

Mesenchymal hamartomas are rare, benign osseous tumors that typically involve the rib cage and present during the first year of life [1-9]. Aggressive growth is not part of the natural history, and surgical excision is generally curative. Fewer than fifty cases have been reported in literature to date. To my knowledge, there has been a case report of this tumor originating in the spine.

The lesion appears expansile on radiographs and often causes deformity of the chest wall and ribs. It may be lobulated, is primarily cartilaginous, and may contain bone trabeculae. Although most of these lesions are benign, malignant transformation has been reported [5].

EPIDEMIOLOGY, PATHOLOGIC FINDINGS, BIOPSY, TREATMENT

Mesenchymal hamartoma is a rare tumor that has not previously been described as originating from the spine and more specifically, from the cervical spine in an adult. Mesenchymal hamartoma most commonly presents as a chest-wall deformity, respiratory compromise, or pneumothorax in an infant or as an incidental finding on a chest radiograph. There have been reports of this tumor being detected in utero [6]. The features of this tumor are usually those of an aggressive, expansile lesion that most commonly originates from a rib.

Fine-needle aspiration has assisted in the diagnosis of these tumors [6,9]. Surgical resection is the optimal treatment and has been associated with a low rate of recurrence [3,5]. One case of malignant transformation has been reported [5]. There is a case of mesenchymal hamartoma originating from the spinal column. In the case of this patient, the clinical and imaging findings suggested compression as opposed to invasion of the caudal roots of the brachial plexus. Standard principles of oncological care suggested that a biopsy should be performed prior to excision, but it was the consensus opinion, at an oncology conference that an excisional biopsy would minimize the risks of recurrence and would not compromise the patient’s care.

Given the age of the patient, the location of tumour, and expansile nature of the lesion, the initial differential diagnosis focused on benign primary tumors of the spine, specifically, and aneurysmal bone cyst and giant-cell tumor. The surgical pathological diagnosis of mesenchymal hamartoma was inspected.

In conclusion, this unusual tumor should be added to the differential diagnosis of posterior element primary spinal tumors. These tumors may ancrroach upon adjacent neural and vascular structures, causing symptoms in addition to local pain. Wide surgical resection appears to have resulted in successful treatment in the case of the cervical spine.

REFERENCES
