Synovial Sarcoma of Head and Neck: from Pathological Diagnosis to Clinical Outcome

1Wen Li, MD,DDS; 1Changlin Li, MD; 2Hongying Zhang, PhD, MD
Department of 1Otolaryngology Head & Neck Surgery 2Pathology, West China Hospital, Sichuan University

ABSTRACT

Synovial sarcoma (SS) is a spindle cell tumor unrelated to mature synovial tissue, and displays variable epithelial differentiation, including glandular formation and even cartilaginous or osseous tissue formation. It has a specific chromosomal translocation t(X;18)(p11;q11). Over 80% arise in the extremities, especially around the knee ... 5~10% of head and neck sarcoma. A limited number of SS have been reported in the parapharyngeal space, larynx, hypopharynx, and maxillofacial region. The treatment modality is controversial and the prognosis is variable with respect of tumor location, pathological categories, safe margin of resection and adjuvant postoperative radiotherapy.

INTRODUCTION

Methods: 39 cases of SS in head and neck region from 1966 to 2011 was retrospectively studied by reviewing the pathological slices of the operative specimen and follow-up from 1 to 16 years with the mean time of four years postoperatively. Results: All patients are males aged from 8 to 66 years old. Pathologically, 26 cases (66.7%) are monophasic and 13 cases (33.3%) are biphasic. No lymphatic metastasis was observed during the 1 to 16 years follow-up. 16 patients had adjuvant radiotherapy or chemotherapy. 9 patients died but no death was directly associated with SS. Conclusion: The loco-regional control of SS seemed related closely to the tumor location rather than pathological patterns. SS of head and neck is a special entity that has good prognosis even after several times of recurrence, cytogenetic methods are recommend-ed to be employed to ascertain the diagnosis.

METHODS AND MATERIALS

RESULTS

39 cases of SS in head and neck region from 1966 to 2011 was retrospectively studied by reviewing the histopathological slices of the specimen, immunohistochemistry and a few cytogenetic analyses including RT-PCR, fluorescence in situ hybridization (FISH) and DNA sequence analysis performed. The follow-up period ranged from 1 to 16 years with the mean time of 4 years postoperatively and the result was analysed with SPSS.

Conclusions:

The loco-regional control of SS seemed related closely to the location of the tumor rather than pathological patterns. SS of head and neck is a special entity that has good prognosis even after several times of recurrence. Cytogenetic methods are recommended to be employed to ascertain the diagnosis in order to choose reasonable treatment protocols, to understand the clinical procedure and predict prognostic outcome.

CONTACT

Wen Li, Department of Otolaryngology Head & Neck Surgery, West China Hospital, Sichuan University 610041 Email: church.ent.wc@163.com

REFERENCES