INTRODUCTION

Intradural chondroma is a rare, slow growing, benign intracranial neoplasm, and is very occasionally observed in combination with intratumoral hemorrhage [1]. Most patients present with symptoms of increased intracranial pressure, seizures, or focal neurological deficits. Intradural chondromas usually occur as isolated lesions, but may occur alongside syndromes such as Ollier's disease or Maffucci's syndrome [2]. We report a rare case of intradural chondroma with intratumoral hemorrhage.

CASE REPORT

A 55-year-old female presented to the emergency room with a complaint of aphasia. Her initial brain computed tomography scan showed an intracranial hemorrhage in the left frontal area. After surgery, histopathological examination confirmed the diagnosis of a chondroma. Intradural chondroma is a rare, slow growing, benign intracranial neoplasm, but is even rarer in combination with an intratumoral hemorrhage. Chondromas are generally avascular cartilaginous lesions. Our case was thought to be caused by the rupture of abnormally weak vessels derived from the friable tumor. Intradural chondromas may be included in the differential diagnosis of intracranial tumors with acute hemorrhages.

Key Words

Intradural chondroma; Intracranial chondroma; Intratumoral hemorrhage; Tumor bleeding; Chondroma.

DISCUSSION

Intracranial chondromas are rare benign neoplasm, which comprise only 0.2-0.3% of all intracranial tumors [3]. Intracranial chondromas are thought to arise from ectopic hyaline cartilaginous rests trapped within suture lines [4]. Due to the rarity of intracranial chondromas, few data about this neoplasm are available. Only 3 cases were identified by H. W. Cushing in a previous series of his 2,033 cases [5].

The first patient with intracranial chondroma was reported
in 1851, and the first successful surgical resection of an intracranial chondroma was reported in 1982 [6]. Two previous reviews documented 125 and 139 cases of intracranial chondromas, respectively [7,8].

The most common location of intracranial chondroma is the skull base, especially the sellar and parasellar regions [7].

Fig. 1. Preoperative MRI images show a space-occupying lesion attached to the falx and dura at the left frontal area. A: T2-weighted image. B: T1-weighted image. C: T1-weighted enhanced image. MRI: magnetic resonance imaging.

Fig. 2. Postoperative image study. A: The tumor was totally removed according to the postoperative MRI scan. B: A six month follow-up MRI scan showed no evidence of recurrence (both, T1-weighted enhanced image). MRI: magnetic resonance imaging.

Fig. 3. Histologic finding of tumor specimen. A: An intracranial tumor, which showed a lobulated growth pattern (×40, H&E). B: Hemorrhagic areas were present inside the tumor (×100, H&E). C: Tumor cells were distributed in the myxoid cartilaginous matrix with eosinophilic cytoplasm and absence of nuclear atypism. A few tumor cells had lacunae (×400, H&E).