Abstract

Purpose: Recently, incidence of perinatally detected asymptomatic adrenal gland mass has been increased because of development and widespread use of radiological diagnostic tools. However, optimal treatment of these masses has not yet been determined. The aim of this study was to elucidate the treatment guideline of perinatally diagnosed adrenal gland masses.

Methods: The authors retrospectively reviewed the medical records of 11 patients with asymptomatic adrenal gland mass detected perinatally, between 1999 and 2004.

Results: Six cases were detected by prenatal ultrasound and 5 cases were incidentally detected by postnatal ultrasound. Six cases (surgery group) underwent mass excision and pathologic diagnosis included neuroblastoma (n=4), adrenocortical adenoma (n=1) and adrenal pseudocyst (n=1). The indications of operation were suspicion of neuroblastoma (n=5) or no size decrease during observation (n=1). Three of the 5 cases of suspicion of neuroblastoma and one case of observation were proved to neuroblastoma. There was no surgical complication in surgery group. All neuroblastoma patients are living well without evidence of recurrence during follow up period (24.4 ± 14.4 month). Five cases (observation group) had a period of closed observation because these cases seemed to be benign or showed decrease of size in follow up ultrasound. During observation period (39 ± 21 week), 4 cases showed complete spontaneous evolution and 1 case was not able to be followed completely, but showed marked decrease in size of mass.

Conclusion: Surgical resection of perinatally diagnosed asymptomatic adrenal gland mass is safe treatment method especially in case of suspicion of neuroblastoma, but closed observation can be applied.