LARGE ADRENAL MYELOLIPOMA OCCURRING IN THE POST-PREGNANCY PERIOD

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Introduction

Adrenal myelolipomas are very rarely seen, generally smaller than 4 cm. Contrary to most of the adrenal tumors it is an endocrinologically inactive tumor. Its exact etiology has not been determined yet. However multiple number of etiopathogenetic factors have been defined.

In this case report we presented a 31-year-old patient whose pregnancy was terminated 10 months previously and developed rapidly progressive giant adrenal myeloma during the course of her pregnancy and discussed the probable causes of this disease in light of literature data.

Case Presentation

Our case was a 31-year-old female patient. For ten months she was describing a stabbing pain on her right upper abdominal quadrant. Her clinical history was unremarkable other than a terminated pregnancy 10 months previously. Any mass lesion was not detected at routine controls performed during her pregnancy. Abdominal CT revealed a mostly homogenous, partly heterogenous mass lesion measuring 19x18x12 cm which priorly thought to stem from the right adrenal. Hormonal examination of the mass disclosed normal serum cortisol, renin, aldosterone levels, and 24-hour urine vanillylmandelic acid and metanephrine values were within normal limits.

Macroscopically, resected material of adrenal mass was encapsulated, smooth-suraced mass weighing 2033 gr with dimensions of 22x19x11 cm. On its outer surface yellowish-orange coloured areas just like thin rims which were probably representing adrenal gland were observed. The cut surface of the material demonstrated a heterogenous appearance with patchy areas resembling yellowish adipose tissue, and also bleeding regions. On its external surface the largest area consistent with adrenal tissue measured nearly 4 cm in diameter. Multiple number of specimens were obtained for histopathological evaluation. Microscopic examination of tissue samples obtained from areas consistent with adrenal gland confirmed the presence of intact adrenal tissue detected as a peripheral thin rim. In most of the areas the lesion consisted of myeloid, erythroid, and megakaryocytic cellular components in the adipose tissue with varying proportions. With this appearance it resembled normal bone marrow morphology.

With available findings the diagnosis of “Adrenal Myelolipoma” was made.
Results

1. As far as we knew, the largest adrenal myelolipoma was 40 cm in diameter. Our case was also a very large adrenal myeloma with its largest diameter of 22 cm.

2. US imaging obtained during pregnancy could not reveal any mass lesion in the renal loge which could be attributed to her asymptomatic gestation period or inability to directly evaluate renal loge because of the mass did not reach remarkably detectable size. In both of these conditions very probably the volume of the mass increased progressively to immense dimensions during pregnancy.

3. The association between adrenal myelolipoma and diseases of the adrenal gland as Cushing disease, Conn syndrome, and congenital adrenal hyperplasia or hematologic diseases as sickle cell anemia, and thalassemia has been also indicated. In our patient none of these concomitant diseases were present.

Conclusion

The etiology of this lesion has not been determined precisely, and multiple number of etiopathogenetic factors have been described. However among the most described theories, hematopoietic stem cell embolization to the adrenal gland is recognized. According to literature findings, our case was the first case who presented with abdominal pain during postpartum period. These pains she experienced during early postpartum period were considered as nonspecific abdominal pains by her attending physician. We think that this progressively increasing mass during nearly 10 months might be related to pregnancy. Can it be a case of stem cell embolization, in other words can hematopoietic stem cells of the fetus transported to the mother via embolization?

Anahtar Kelimeler: Myelolipoma, adrenal gland, pregnancy