Adrenal Myelolipoma: A Case Report

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Citation

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Abstract

Adrenal myelolipoma is a rare benign condition. Most of these tumour are diagnose as an incidental finding during imaging. The asymtomatic patient with small lesion should be followed but symptomatic individual, functional tumour and large lesion are the indication of surgery. We report a case of adrenal myelolipoma.

Adrenal myelolipoma which is composed of hemopoietic and adipose elements is a rare benign tumor ([1,2,3,4,5,6,7]). Most adrenal myelolipomas are asymptomatic and are found incidentally ([3]). They occur usually in adults ([1,3]). The histogenesis of adrenal myelolipoma is not clear and this lesion has been found to be associated with endocrine disorders ([4,5,6,7]). The surgical treatment becomes necessary when the tumors size increases or it become symptomatic.

CASE REPORT

A 55 year-old woman was admitted with intermittent right abdominal pain. There was no history of any past medical illness. Physical examination and laboratory tests were normal. Computerized tomography showed a large right retroperitoneal mass above the right kidney. A diagnosis of renal angiolipoma was considered (Figure 1). A laparotomy was performed revealing a large mass above the upper pole of the right kidney. The tumor was seperate from the right kidney so the kidney could be preserved. Pathologic examination showed a 483 gr 12x10x6 cm, well circumscribed solid tumor expanding the adrenal medulla. Microscopic examination showed proliferation of adipocytes and myeloid tissue which contains megakaryocytes, erythroid cells and lymphocytes (Figure 2). A diagnosis of myelolipoma of the adrenal gland was made.

{image:1}

{image:2}

DISCUSSION

Adrenal myelolipoma is an uncommon benign tumor. Its frequency autopsy rangies from 0,08 to 0,4 % ([7]). It is diagnosed incidentally in most cases because of its non-functioning nature. It varies in size from microscopic foci to 34 cm. The adrenal myelolipoma cause is unknown. The pathogenesis of myelolipoma remains speculative([4,7]). Theories of pathogenesis include retention of embryonic rests or extramedullary hematopoesis. The most favourable theory is of metaplastic origin ([4]). Microscopically adrenal myelolipoma consist of adipocytes and hematopoietic cells. Hemorrhage and calcification may be present was seen in our case([7]). The differential diagnosis includes other fatty tumors of the adrenal gland ([1]). Adrenal myelolipoma has specific sonographic and computed tomographic feature and and sometimes a diagnosis of renal angiomyeolipoma, retroperitoneal lipoma, liposarcoma of the adrenal gland are considered in the differential diagnosis([2]). When myeloid tissue, calcification or hemorrhage is too extensive the fat content may not be recognised. Although the majority of myelolipomas present as isolated adrenal masses, myelolipomatous foci have been reported in association with other adrenal pathologic conditions. These associated adrenal pathologic conditions include adrenocortical hyperplasia, adrenocortical adenomas, adrenocortical carcinomas, and endocrinologic dysfunctions, including Addison disease, Conn syndrome, 21-hydroxylase deficiency, 17-hydroxylase deficiency, and ectopic corticotropin production ([4,6,7]). A high index of suspicion should be maintained with surgical treatment being reserved for selected patients with large and symptomatic lesions. This case is unusual in view of the large size of the lesion making preoperative diagnosis difficult.

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