

CONCLUSION

High-risk ACC with suspected residual disease remains a therapeutic challenge. While mitotane remains the cornerstone of adjuvant therapy, SBRT may represent a promising adjunctive local treatment modality in carefully selected patients. Further studies are required to define its role in improving local control and outcomes in ACC.

EP_A023

WHEN CORTISOL OVERWHELMS THE HEART: A FATAL CASE OF METASTATIC ADRENOCORTICAL CARCINOMA PRESENTING AS ACUTE HEART FAILURE

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INTRODUCTION

Cushing's syndrome is a multisystem disorder with significant cardiovascular morbidity, yet presentation as acute heart failure is uncommon. When driven by adrenocortical carcinoma (ACC), the clinical course is often aggressive and rapidly fatal, with particularly poor out-comes in resource-limited settings where access to therapy is constrained.

CASE

A 39-year-old previously well female presented with acute decompensated heart failure, newly diagnosed hypertension, type 2 diabetes mellitus, and obesity, preceded by a 3-year history of secondary amenorrhea and progressive weight gain. On admission, she exhibited florid Cushingoid features. Biochemical evaluation confirmed severe adrenocorticotrophic hormone (ACTH)-independent hypercortisolism: morning serum cortisol 1,950 nmol/L, failure of suppression on overnight dexamethasone suppression test (post-ODST cortisol 2022.9 nmol/L), and elevated 24-hour urinary free cortisol (2,069 nmol/24 hours, 2.56 × upper limit of normal). Androgen excess was evident, with elevated dehydroepiandrosterone sulfate (DHEAS more than 27 µmol/L) and testosterone (9.91 nmol/L). ACTH was suppressed, supporting an adrenal source, while aldosterone was normal. Contrast-enhanced computed tomography demonstrated a large left adrenal mass (12 cm) with tumor thrombus extending into the inferior vena cava and renal veins, with extensive hepatic and pulmonary metastases, consistent with advanced ACC. Management was limited by disease severity and resource constraints. Ketoconazole was contraindicated due to transaminitis, and alternative steroidogenesis inhibitors were unavailable, leaving metyrapone as the only feasible option. Oncological therapy was deferred due to sepsis and clinical instability. Her course was fulminant, complicated by recurrent heart failure, sepsis, and metabolic derange-

ments, culminating in refractory cardiopulmonary failure. She died within 1 month of diagnosis, prior to definitive oncological intervention.

CONCLUSION

Fulminant cortisol-secreting ACC may present catastrophically as acute heart failure and progress rapidly. Early recognition and timely access to multimodal cortisol-lowering therapy are critical, particularly in resource-limited settings. In fulminant hypercortisolism, the challenge is not diagnosis—but timing.

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SOLITARY PROGRESSION TO BONE: A RARE MANIFESTATION OF ADRENOCORTICAL CARCINOMA

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INTRODUCTION

Adrenocortical carcinoma (ACC) is a rare and aggressive malignancy with a predilection for metastasis to the liver, lungs, and lymph nodes. Bone involvement is less common and typically occurs alongside widespread disease. Isolated skeletal progression without visceral involvement is unusual and not well characterized.

CASE

A 60-year-old female underwent left adrenalectomy in 2019 for an incidentally detected adrenal mass, which was reported as a benign adrenal cortical adenoma (Ki-67 <3%). In 2022, she presented with persistent low back pain. Imaging demonstrated fluorodeoxyglucose-avid lesions involving the T12 vertebra and right ilium, without evidence of local recurrence or visceral metastases. Histopathological evaluation of a bone biopsy initially suggested a neuroendocrine neoplasm based on synaptophysin positivity. Following multiple expert reviews and integration of clinical, radiological, and immunohistochemical findings, a consensus diagnosis of metastatic ACC was established.

She received palliative radiotherapy to symptomatic skeletal sites and subsequently completed six cycles of etoposide, doxorubicin, and cisplatin chemotherapy in 2023, achieving disease stabilization. Surveillance imaging in May 2025 demonstrated progression confined to the axial and appendicular skeleton, with no involvement of the adrenal bed or visceral organs. Mitotane therapy was initiated in December 2025. Ongoing management focuses on systemic disease control, symptom palliation, and multidisciplinary supportive care.