

## Adrenalectomy for Hemorrhagic Adrenal Adenoma: A Case Report

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### Abstract

### Case Report

Hemorrhagic adrenal adenomas are rare and represent a diagnostic and therapeutic challenge. This report details the case of a 45-year-old patient who presented with acute epigastric pain, resistant hypertension, and laboratory findings suggestive of hormonal hyperfunction. Imaging revealed a hemorrhagic adrenal adenoma, which was managed successfully with laparoscopic adrenalectomy. The case highlights the importance of a multidisciplinary approach and the efficacy of minimally invasive surgery in managing such complex adrenal pathologies [1].

**Keywords:** Hemorrhagic, adrenal, adenoma.

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## INTRODUCTION

Adrenal adenomas are common incidental findings; however, hemorrhagic variants are rare and can lead to acute presentations requiring prompt diagnosis and treatment. Hemorrhage within an adrenal adenoma often complicates the clinical and radiological diagnosis, necessitating a comprehensive evaluation to guide management [2].

## CASE PRESENTATION

A 45-year-old male presented with acute epigastric abdominal pain and resistant hypertension. Laboratory tests revealed hypercortisolism and elevated urinary catecholamines, suggestive of hormonal hyperfunction. Abdominal computed tomography (CT) identified a 3 cm right adrenal mass with areas of hemorrhagic change. Given the clinical findings and imaging results, the patient was referred for surgical intervention.

### Surgical Procedure

The patient underwent a right adrenalectomy via a laparoscopic approach. Intraoperatively, trocar incisions were placed for optimal access, and the adrenal gland was carefully dissected and removed. Post-operative findings included well-placed sutures at the trocar sites (Figure 1). Examination of the resected adrenal gland revealed significant hemorrhagic changes (Figure 2).



Figure 1: Post-operative abdomen showing trocar incisions and suture points

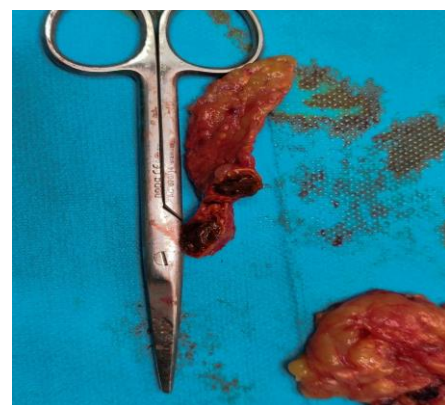


Figure 2: Resected adrenal gland with hemorrhagic changes

## Diagnosis and Analysis

Histopathological examination confirmed an adrenal adenoma with areas of hemorrhage. The hormonal hyperfunction was consistent with the symptoms and laboratory findings. The rare occurrence of hemorrhage in an adrenal adenoma poses challenges, as it may mimic other adrenal pathologies such as pheochromocytomas or adrenal carcinomas [3].

## DISCUSSION

Hemorrhagic adrenal adenomas are uncommon and often present with non-specific symptoms such as abdominal pain and signs of hormonal excess. Imaging plays a crucial role in identifying hemorrhagic changes within the adrenal gland, but a definitive diagnosis typically requires histological analysis. The laparoscopic approach, as employed in this case, offers advantages including reduced post-operative pain, shorter hospital stays, and faster recovery compared to open surgery [4].

A multidisciplinary team is essential in managing these cases, involving endocrinologists, radiologists, and surgeons to ensure accurate diagnosis and effective treatment.

## CONCLUSION

This case highlights the rare presentation of a hemorrhagic adrenal adenoma and underscores the effectiveness of laparoscopic adrenalectomy as the treatment of choice. The findings emphasize the value of multidisciplinary collaboration in managing complex adrenal pathologies and the role of minimally invasive techniques in optimizing patient outcomes.

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