

Case report: A giant hemorrhagic adrenocortical carcinoma causing cardiorespiratory embarrassment

ABSTRACT

Adrenocortical carcinoma (ACC) is a rare aggressive tumor that can be hormone or non-hormone secreting. It is usually associated with fatal outcomes due to its physiological hormonal interaction. We report a successful anaesthetic and surgical management for a patient who presented to us with a huge hemorrhagic ACC which was complicated with acute respiratory failure. A 56-year-old lady presented to us with progressive abdominal distension and right hypochondriac pain for two months. She was anemic with elevated liver enzymes. Urgent computed tomography (CT) of the abdomen and pelvis showed a huge right supra renal mass. She subsequently developed respiratory failure due to splinting of diaphragm, of which successfully underwent an emergency exploratory laparotomy. Subsequent endocrine and histopathological work up showed an adrenocortical carcinoma (ACC). Suprarenal masses usually originate from the adrenal glands. They should be investigated to rule out pheochromocytoma, which originate from the inner adrenal medulla or outer cortex to form ACC. The latter usually occur in women and of poor prognosis. Huge ACC may cause acute respiratory failure by way of splinting of diaphragm. Both anaesthetic and surgical teams should be well trained in handling patients who undergo adrenal surgeries. A giant hemorrhagic functional ACC is extremely uncommon with very poor prognosis. Such conditions should be investigated to rule out pheochromocytoma. Its potential neuro-hormonal interactions and anatomical correlations can cause fatal perioperative cardio-respiratory embarrassment. The anaesthetic and surgical teams should be capable in managing the hemodynamic instabilities that may present during surgical manipulation and resection of a large ACC.