

# Metastases

## Metastases

Definition Adrenal metastases are not uncommon and often portend - disseminated incurable disease. Primary tumours that commonly spread to the adrenals include lung, renal, gastric, breast and colorectal cancers. The decision regarding surgical intervention must be multidisciplinary and in conjunction with the patient, following careful diagnostic work-up to determine whether it is an isolated adrenal metastasis (seen most often with renal, lung and colorectal primaries) or a more widespread metastatic picture. Patients should therefore undergo CT thorax, abdomen and pelvis and PET-CT to exclude disease at other sites. They should also be screened for catecholamine and cortisol excess to exclude a coincident hormonally active tumour. Treatment If disease is widespread, metastasectomy will not usually be appropriate and systemic or palliative treatment should be the norm. Adrenal metastasis diagnosed at presentation (synchronous disease) should be removed if ipsilateral to a renal cell cancer (radical nephrectomy). In the case of other primary tumours, it should be observed with interval scanning at 3-6 months; if the lesion remains stable and isolated, resection should be considered. If adrenal metastasis arises more than 6 months after initial treatment (metachronous), PET-CT should be performed to exclude widespread disease; if the lesion is solitary, excision can be considered. Surgery Laparoscopic adrenalectomy is the preferred surgical option. Metastases often induce a significant desmoplastic reaction that can make excision more difficult, particularly when lesions are >4 cm. If there is evidence of local invasion, but the surgery is likely to improve survival, open surgery and bloc excision may be appropriate. Note that, in the setting of previous nephrectomy with adrenalectomy, excision of an Addison's disease, 1795-1860, physician, Guy's Hospital, London, UK, described the effects of disease of the suprarenal capsules in 1852. Rupert Waterhouse, 1873-1958, physician, Royal United Hospital, Bath, UK, described the effects of disease of the suprarenal capsules in 1912. Carl Friderichsen, 1886-1979, Medical Superintendent, Sundby Hospital, Copenhagen, Denmark, gave steroid dependent. - -

TABLE 57.1 Causes and classification of adrenal insufficiency. Cause of adrenal insufficiency Pathophysiology Autoimmune adrenalitis (polyglandular autoimmune syndromes) Serum antibodies against the steroidogenic enzymes Infective tuberculous disease Caseating granulomatous destruction Bilateral adrenal infarction Severe bacterial sepsis in children, e.g. meningococcal septicaemia Bilateral adrenal haemorrhage Traumatic obstetric delivery Malignancy Infiltration by secondary cancers Congenital adrenal hyperplasia (adrenogenital disorders of steroidogenesis syndrome) Pituitary destruction Infarction, trauma, haemorrhage or infiltration, e.g. craniopharyngioma Cessation of chronic glucocorticoid therapy Zona fasciculata and reticularis atrophy owing to long-term CRH suppression by exogenous corticosteroids Treatment of Cushing's syndrome and Cushing's CRH suppression following removal of ACTH-secreting or disease cortisol-secreting tumours Hypothalamic disorders Trauma, stroke, tumour infiltration, radiation, infection ACTH, adrenocorticotrophic hormone; AI, adrenal insufficiency; CRH, corticotropin-releasing hormone. a Waterhouse-Friderichsen syndrome.

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