Surgical management of adrenal metastases
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Abstract

Purpose This paper aims to review controversies in the management of adrenal gland metastasis and to reach an evidence-based consensus.

Materials and methods A review of English-language studies addressing the management of adrenal metastasis, including indications for surgery, diagnostic imaging, fine-needle aspiration, surgical approach, and outcome was carried out. Results were discussed at the 2011 Workshop of the European Society of Endocrine Surgeons devoted to adrenal malignancies and a consensus statement agreed.

Results Patients should be managed by a multidisciplinary team. Positron emission tomography coupled with computed tomography (PET/CT) scanning is the technique of choice for suspected adrenal metastasis. When PET/CT is not available or results are inconclusive, the CT scan or magnetic resonance imaging can be used. Patients should undergo complete hormonal evaluation. Adrenal biopsy should be reserved for cases in which the results of noninvasive techniques are equivocal. If malignancy has been reliably ruled out, patients with adrenal incidentalomas should be managed like noncancer patients.

Conclusions A patient with suspected adrenal metastasis should be considered a candidate for adrenalectomy when: (a) control of extra-adrenal disease can be accomplished, (b) metastasis is isolated to the adrenal gland(s), (c) adrenal imaging is highly suggestive of metastasis or the patient has a biopsy-proven adrenal malignancy, (d) metastasis is confined to the adrenal gland as assessed by a recent imaging study, and (e) the patient’s performance status warrants an aggressive approach. In properly selected patients, laparoscopic (or retroperitoneoscopic) adrenalectomy is a feasible and safe option.