Cabergoline

see Cabergoline for clinically nonfunctioning pituitary neuroendocrine tumor.

(brand names Caberlin, Dostinex and Cabaser), an ergot derivative, is a potent dopamine agonist on dopamine receptor D2. Rat studies show cabergoline has a direct inhibitory effect on pituitary lactotroph (prolactin) cells.

It is frequently used as a first-line agent in the management of prolactinomas due to higher affinity for D2 receptor sites, less severe side effects, and more convenient dosing schedule than the older bromocriptine.

Some studies have shown that a significant and rapid tumor shrinkage resulting from treatment with cabergoline can occur and it is thought that some complications are related with this tumor regression [1].

The vast majority of prolactinomas will respond to conventional doses of cabergoline (≤2 mg/week) that do not carry an increased risk of cardiac valvular abnormalities. DA therapy may be successful withdrawn in a subset of patients and thus is not necessarily a lifelong commitment.

Cabergoline is typically effective for treating prolactinomas; however, some patients display cabergoline resistance, and the early characteristics of these patients remain unclear.

In general, cabergoline is the preferred treatment for micro- and macroprolactinomas, because it is more effective with respect to normalization of prolactin levels and reduction of prolactinoma size and because it has fewer side-effects compared to bromocriptine. Recently, it has been suggested that a standardized, individualized, stepwise, dose-escalating regimen of cabergoline may normalize prolactin levels and reduce prolactinoma size in patients who were otherwise considered to be dopamine agonist resistant. In general, the cardiac adverse effects of dopamine agonists reported in Parkinson's disease are not of clinical concern in the treatment of prolactinomas, which are treated with much lower doses. Nonetheless, there is uncertainty with respect to the dose and duration of cabergoline treatment, which requires echocardiographic follow-up. Although withdrawal of dopamine agonists may be considered in patients with prolactinomas well controlled by dopamine agonists, especially in postmenopausal women, recurrence of signs and symptoms may occur in a considerable portion of patients [2].

Determining cabergoline response using tumor volume reduction (TVR) and NP 3 months after treatment is useful for predicting later outcomes. However, further cabergoline administration should be considered for patients with TVR >25% at 3 months without NP, particularly those with huge prolactinomas, because a delayed response may be achieved. As surgery can reduce the cabergoline dose necessary for successful disease control, it should be considered for cabergoline-resistant patients [3].

Cabergoline for Cushing's disease

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