Metastatic spread to the pituitary from a distant primary malignancy is commonly associated with metastases to other tissues and poor prognosis unless efficient systemic targeted medical treatment is available for primary cancer (melanoma, lymphoma) [1].

Survival after pituitary metastases detection has improved over time, encouraging individualized interventions directed to metastases to improve quality of life and increase survival [2].

A systematic review according to PRISMA recommendations identified 2143 records, of which 157 were included. Median survival from MP diagnosis was 14 months. Overall survival was significantly different between lung, breast and kidney cancers (P < .0001). Survival was impacted by radiotherapy (hazard ratio (HR) 0.49; 95% confidence interval (CI) 0.35-0.67; P < .0001) and chemotherapy (HR 0.58; 95% CI 0.36-0.92; P = .013) but not by surgery. Stereotactic radiotherapy tended to improve survival over conventional radiotherapy (HR 0.66; 95% CI 0.39-1.12; P = .065). Patients from recent studies (≥ 2010) had longer survival than others (HR 1.36; 95% CI 1.05-1.76; P = .0019).

This systematic review based on 657 cases helped to better identify clinical features, oncological characteristics, and the effect of current therapies in patients with MP. Survival patterns was conditioned upon primary cancer histologies, the use of local radiotherapy and systemic chemotherapy, but not by surgery [3]

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