**CLINICAL CHARACTERIZATION OF CABERGOLINE RESISTANT PROLACTINOMAS : A multicenter experience on 92 patients.**

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**Introduction:** Resistance to dopamine agonists (DA) occurs in a minority of prolactinoma patients but represents an important clinical challenge.

**Objective:** To analyse a large series of resistant prolactinomas.

**Design:** A multicentre retrospective study.

**Patients:** 92 patients with persisting hyperprolactinemia on cabergoline (CAB) > 2.0 mg weekly.

**Results:** Macroadenomas were prevalent (82.6%), especially in men (97.5%), who accounted for 44.0% of the patients, were older than women at diagnosis (39.6±17.2 *vs* 25.9±12.3 yrs-old, P<0.0001) and presented with a more severe disease. Eight patients had late pharmacological resistance (8.7%). A genetic basis could be suspected in 13 patients (14.1%). An exclusive pharmacological approach was used in 36 patients (39.1%) but most underwent surgery (60.9%), including repeated surgery (10.9%) and/or post-operative radiotherapy (14.1%). The maximal weekly dose of CAB (CABmax/w) was 4.1±1.7 mg [2.0-10.5 mg] and was higher in patients treated by multimodal therapy (P=0.003 *vs* pharmacological treatment). However, a debulking effect of surgery was shown in patients receiving pre- and post-operative CAB, who achieved a better PRL control (P<0.0001) with a significant reduction in CABmax/w (P=0.0007). After a median follow-up duration of 88.5 months, PRL normalization and tumor disappearance were achieved in 28% and 19.9% of the patients, respectively. Four patients developed a highly aggressive tumor (4.3%) and 3 a pituitary carcinoma (3.3%), with a 4.8% mortality rate. PRL normalization, CABmax/w and aggressive tumor evolution were similar in both sexes.

**Conclusion:** Resistant prolactinomas remains a serious clinical concern. New therapeutic tools and precocious diagnosis of genetic forms should help improving their outcome.