# Case 7

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Clinical Abstract:

A 25 year old woman presented to another hospital with progressively worsening headaches, galactorrhea and amenorrhea. Previous medical history was unremarkable.

Laboratory tests were notable for a serum prolactin of 5000 ug/L (normal < 20 ug/L). A CT scan of the head showed a large pituitary mass with suprasellar and third ventricular extension. The scan was otherwise unremarkable.

One month later partial resection of a chromophobe pituitary adenoma was performed by transfrontal craniotomy. Postoperatively, the patient received conventional megavoltage therapy delivered by a 6-mV linear accelerator unit. Large 5 x 7.5 cm parallel-opposing temporal ports were used to a total dose of 6200 centigray (cGy), delivered in fractions of 200 cGy 5 days a week for 6 weeks, because of the suprasellar extension. She improved after surgery and radiation therapy with resolution of the headaches and galactorrhea, although she never regained normal menstrual cycles.

A follow up CT scan of the head one year after surgery showed residual pituitary tumor and irregular enhancement in the left frontal lobe, interpreted to be post-surgical changes. Shortly afterwards, the patient began to develop progressive blindness with eventual total loss of vision in the right eye and partial loss in the left. She also developed clinical and laboratory evidence of hypopituitarism requiring replacement therapy. She received a course of bromocriptine without effect.

Six years and seven months after surgery the patient presented complaining of recurrent severe headaches, lethargy, dizziness, inappropriate affect, expressive aphasia and right ear deafness. CT and MRI studies of the head revealed a large pituitary mass with extension to the suprasellar region, both cavernous sinuses and both internal carotid arteries. In addition, there was marked thickening of the cortex of the left posterior frontal, insular, superior and middle temporal gyri. The patient was admitted to the hospital, but died suddenly.

At general autopsy, visceral examination showed a massive pulmonary embolus but was otherwise unremarkable.

Materials submitted: One 2 x 2 Kodachrome
One H&E and one unstained slide of cortex

Points for discussion: Diagnosis
Pathogenesis