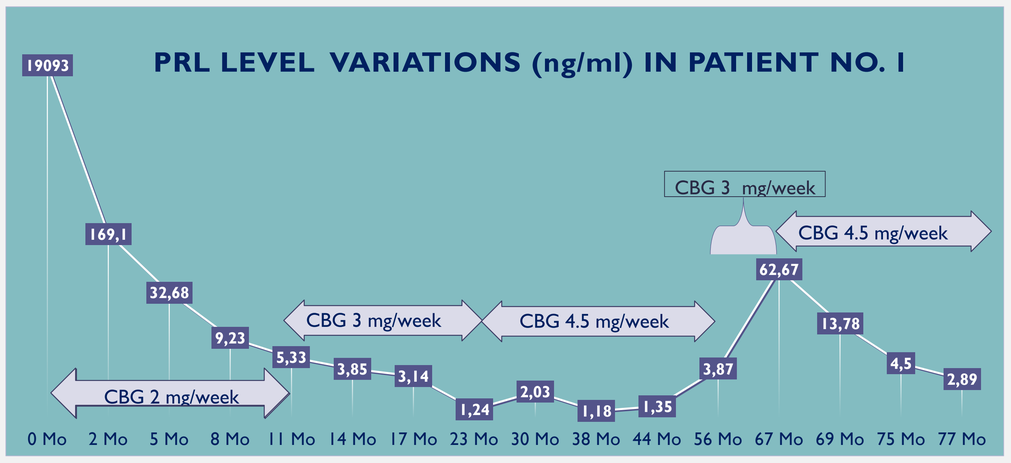
HETEROGENEOUS PRESENTATION OF GIANT PROLACTINOMA

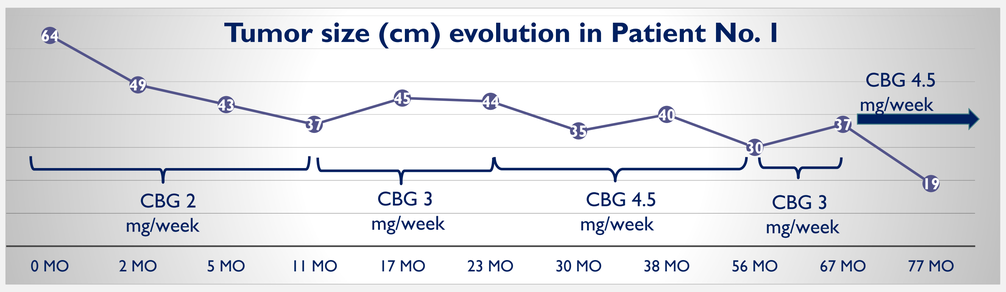
Lidia RADOMIR[1], Adriana GOGOI[1], Simona JERCALAU[1], Corin BADIU[1,2]
[1] "CI Parhon" National Institute of Endocrinology, Bucharest, Romania
[2] "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Background: Giant prolactinomas are relatively rare pituitary tumors, defined as adenomas greater than 4 cm, with extrasellar extension, presenting with PRL levels > 1000 ng/ml. Dopamine agonists (DA) are the first-line treatment. Most (90 %) of giant prolactinomas occur in men, presenting with a symmetric distribution with a peak during the forth decade of life. It appears that men are younger at diagnosis and with larger tumor size, not only due to a longer delay before diagnosis, but rather to an overall greater growth potential of prolactinoma in males.

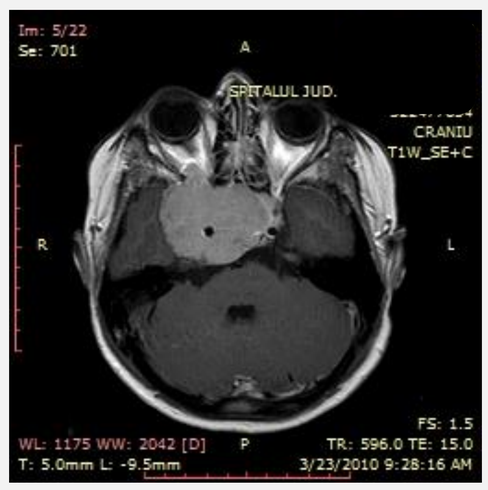
Objectives and Methods: We reviewed two cases of giant prolactinoma in men to characterize clinical features and the response to DA therapy.

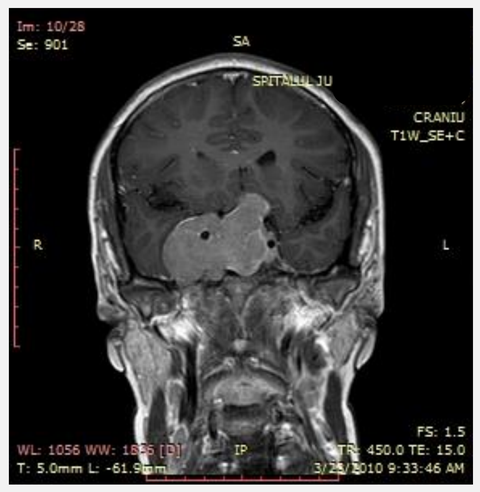
	PATIENT 1	PATIENT 2
Age at presentation	17 years old	27 years old
Duration of symptoms prior to diagnosis	2 months	12 months
Clinical presentation	• frontal headache, • visual deficit, • nausea, • dizziness.	• fronto-occipital headache, • weakness, • recurrent posterior epistaxis, • decreased libido.
Initial PRL level	19 093 ng/ml	31 398 ng/ml
Maximum tumor diameter at diagnosis	6.4/3.4 cm	6/5.6/4.3 cm
DA therapy (maximal dose)	CBG 4.5 mg/week	CBG 2.0 mg/week
Nadir PRL level	1.18 ng/ml	9.14 ng/ml
Tumor size at the last evaluation	1.9/1.2 cm	4.8/4.6/4.5 cm
Hormone deficiency at diagnosis	• ↓ FSH, LH, testosterone • ↓ TSH, FT4 • ↓ ACTH, basal cortisol	• ↓ FSH, LH, testosterone
Visual field testing at diagnosis	• right side temporal quadrantanopsia • left side temporal hemianopsia.	Normal
Hormone deficiency at the last check up	• persistent central hypothyroidism.	• persistent hypogonadotropic hypogonadism.
Visual field testing at the last check up	Normal	Normal
Period of follow-up	6 years and 6 months	3 months





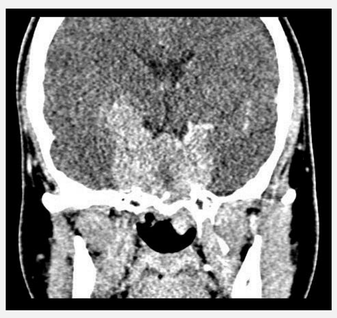
MRI scan in patient No. 1 BEFORE DA therapy.

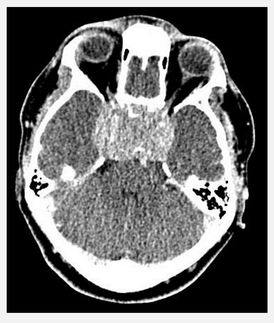


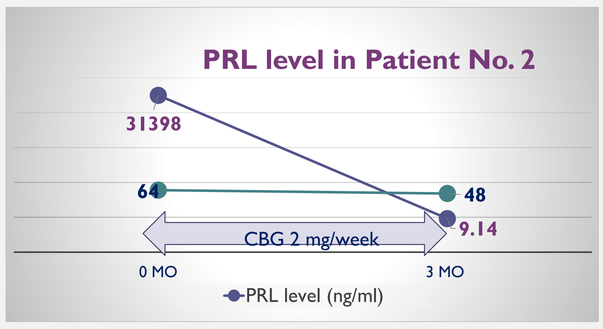


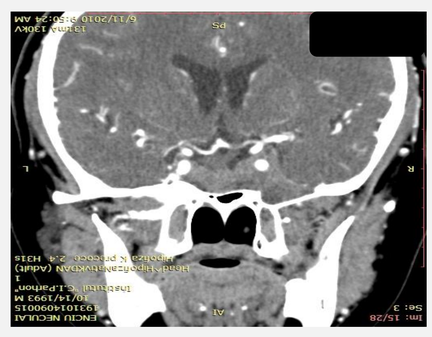
CT scan in patient No. 1 AFTER 3 months of DA therapy.

CT scan in patient No. 2 before DA therapy.

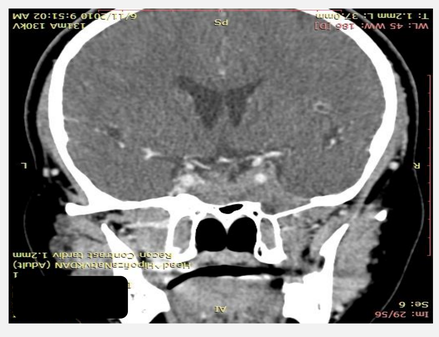






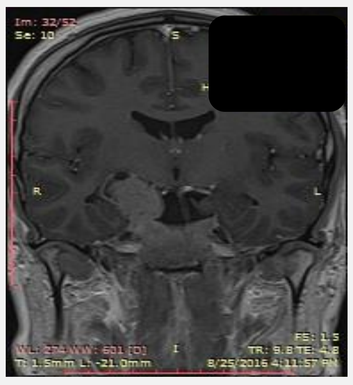


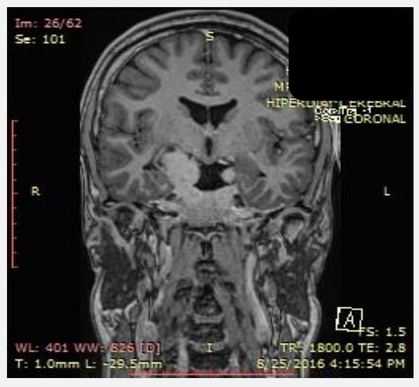
CT scan in patient No. 1 AFTER 5 years 7 months of DA therapy.

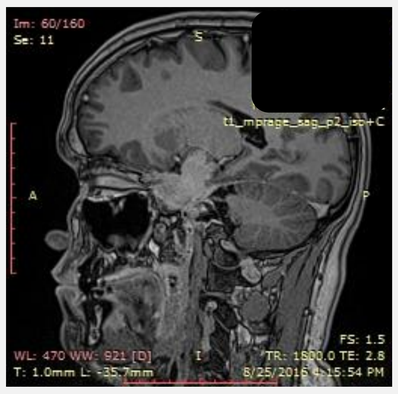


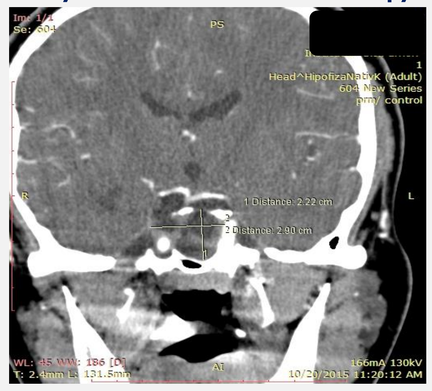
CT scan in patient No. 1 AFTER 6 years 6 months of DA therapy.

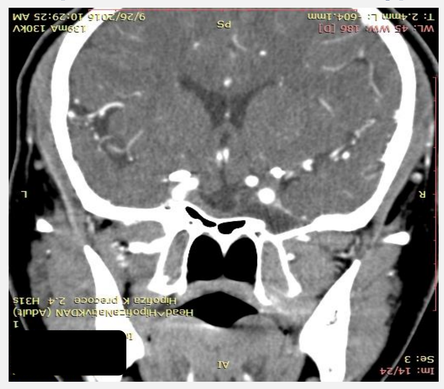
MRI scan in patient No. 2 AFTER 3 months of DA therapy.











Conclusions: Despite the similar size and PRL values, giant prolactinomas in men can have a heterogeneous profile at diagnosis, from the classical visual field deficiency and pituitary failure to normal visual field and almost normal pituitary function. Correct diagnosis is capital to ensuring appropriate treatment. Various studies showed that most giant prolactinomas are less responsive to DA therapy, but in the two cases that we reviewed, improvement was seen in PRL normalization but also in size reduction. Lifelong follow-up is usually needed.

Refferences:

1. Delgrange, Etienne, et al. "Giant prolactinomas in women." *European journal of endocrinology* 170.1 (2014): 31-38.
2. Aljabri, Khalid S., Samia A. Bokhari, and Ahmad Akl. "Giant Prolactinoma: Case Report and Review of Literature." *American Journal of Medical Case Reports* 3.12 (2015): 399-402.
3. Fernandes, Vera, et al. "Ten-year follow-up of a giant prolactinoma." *BMJ case reports* 2015 (2015): bcr2015212221.
4. Shimon, Ilan, Carlos Benbassat, and Moshe Hadani. "Effectiveness of long-term cabergoline treatment for giant prolactinoma: study of 12 men."*European Journal of Endocrinology* 156.2 (2007): 225-231.
5. Maiter, Dominique, and Etienne Delgrange. "Therapy of endocrine disease: the challenges in managing giant prolactinomas." *European Journal of Endocrinology* 170.6 (2014): R213-R227.

BES2016 78--EP
Neuroendocrinology and pituitary
Lidia Radomir
DOI: 10.3252/pso.eu.BES2016.2016
Poster presented at: SfE BES 2016