

Supplementary Macterial: Efficacy and Cerebrospinal Fluid Rhinorrhea after Cabergoline Treatment in Patients with Bioactive Macroprolactinoma

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Table S1. Baseline characteristics and radiologic characteristics of bioactive prolactinoma according to radiologic response of cabergoline.

	Total (n = 140)	Responder (n = 124)	Non-responder (n = 16)	p-value
Demographics				
Age (years)	43 ± 15	43 ± 15	45 ± 14	0.77
Male sex (n, %)	108 (77.1)	96(77.4)	12(75.0)	0.76
First month CAB dose (mg/week)	2 (1-2)	2(1-2)	2(1.3-3)	0.26
Hormone replacement therapy (n, %)	23 (16.4)	19(15.3)	4(25.0)	0.301
Steroid replacement	10 (7.2)	7(5.6)	3(20.0)	0.077
Thyroid hormone replacement	16 (11.4)	13(10.5)	3(18.8)	0.4
Steroid and thyroid hormone replacement	6(4.3)	4(3.2)	2(12.5)	0.085
Sex hormone replacement	10 (7.1)	8(6.5)	2(12.5)	0.32
Hormone deficiency recovery	7(7.6)	6(4.8)	1(6.3)	0.66
Total CAB dose in 1 st year (mg/year)	100 (92-144)	136(92-144)	96(81-145)	0.48
Duration of CAB use (months)	66 (31-92)	59(31-89)	84.5(65-100)	0.25
Hormones (Basal)				
Prolactin (ng/mL)	2571 (1608-4818)	2676(1610-5350)	2325(1365-4506)	0.43
Biochemical & radiological responders (n,%)	104(74.3)	103(83.1)	1(6.3)	<0.01
Radiologic features (Basal)				
Grade of Knosp				
Grade 0 (n, %)	5 (3.6)	4(3.2)	1(6.3)	0.46
Grade I (n, %)	8 (5.7)	6(4.8)	2(12.5)	0.23
Grade II (n, %)	12 (8.6)	11(8.9)	1(6.3)	0.72
Grade IIIA (n, %)	28 (20.0)	24(19.4)	4(25.0)	0.53
Grade IIIB (n, %)	2 (1.4)	2(1.6)	0(0)	0.61
Grade IV (n, %)	85 (60.7)	77(62.1)	8(50.0)	0.35
Sphenoid sinus pneumatization (n, %)	84 (60.0)	74(59.7)	10(62.5)	0.83
T2 SI ratio	1.4 (1.0-1.4)	1.2(1-1.4)	1.2(0.95-1.4)	0.78
Tumor volume (cm ³)	6.5 (6.7-12.1)	6.8(3.9-13.4)	5.6(2.6-11.2)	0.36
Prolactin index (ng/mL · cm ³)	443(290-705)	432(283-663)	351(247-621)	0.77
Maximal diameter (mm)	28.6 (24.1-35.1)	29(24.5-36.0)	28.7(23-34.5)	0.83

Normally distributed continuous variables were described as mean ± SD and median (interquartile range) for non-normally distributed continuous variables, and number (%) for categorical variables. Bold denotes statistical significance at $p < 0.05$

Table S2. Clinical characteristics of patients with CSF rhinorrhea compared to hormonal and radiologic non-responders by propensity score matching.

	CSF rhinorrhea (<i>n</i> = 7)	Non-responders (<i>n</i> = 14)	<i>p</i> -value
Demographics			
Age (years)	39.9± 8.9	36.7± 15.3	0.58
Male sex	6(85.7)	12(85.7)	0.99
First month CAB dose (mg/week)	2(1-3)	2(2-3)	0.50
Hormone replacement therapy (n, %)	4(57.1)	4(28.6)	0.35
Steroid replacement (n, %)	3(42.9)	0(0)	0.03
Thyroid hormone replacement (n, %)	3(42.9)	2(14.3)	0.28
Steroid and thyroid hormone replacement (n,%)	3(42.9)	0(0)	0.026
Sex hormone replacement (n, %)	2(28.6)	3(21.4)	0.99
Hormone deficiency recovery (n,%)	1(14.3)	0(0)	0.99
Total CAB dose (mg/year)	74(48-140)	142(96-157)	0.06
Duration of CAB use (months)	49(25-94)	80(52-95)	0.43
Hormones (Basal)			
Prolactin (ng/mL)	6128(4042-10200)	4385(2439-7484)	0.23
Radiologic features (Basal)			
Grade of Knosp IV (n, %)	7(100)	8(57.1)	0.061
Cystic component (n, %)	2(28.6)	9(64.3)	0.18
Hemorrhagic component (n, %)	1(14.3)	3(21.4)	0.99
Cavernous sinus involvement (n, %)	7(100)	10(71.4)	0.26
Skull base involvement (n, %)	7(100)	14(100)	NA
Sphenoid sinus post sellar involvement (n,%)	7(100)	9(64.3)	0.12
Sphenoid sinus pneumatization (n, %)	7(100)	9(64.3)	0.12
T2 SI ratio	1.2(1.0-1.3)	1.4(1.2-1.6)	0.07
Tumor volume (cm ³)	25.6(18.4-27.2)	12.1(7.9-25.5)	0.07
Prolactin index (ng/mL · cm ³)	283(230-363)	335(166-616)	0.55
Maximal diameter (mm)	43(38-45.8)	35.6(28.8-53.8)	0.85

Normally distributed continuous variables were described as mean ± SD and median (interquartile range) for non-normally distributed continuous variables, and number (%) for categorical variables. Bold denotes statistical significance at *P* <0.05.