

THE IMPACT OF THE CUSHING'S DISEASE REMISSION IN ASSOCIATED COMORBIDITIES

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BACKGROUND

The Cushing's disease (CD) is associated with comorbidities that have a significant impact on patients' quality of life. However, it is not known the true impact of the disease remission on these comorbidities.

We **aim** to assess the evolution of comorbidities associated with CD, after its remission.

METHODS

- Observational, analytical and retrospective study
- **18 patients** with CD in remission, followed in our Department
- Clinical data concerning the time of diagnosis (active disease) and one year after surgery/radiotherapy (remission) were collected
- **Statistical Analysis:**
 - IBM® SPSS® Statistics v. 20.0 | $p < 0.05$ → statistically significant

RESULTS

- 77.8% ♀ | 22.2% ♂
- Mean Age: **39.6±15.1 years[14-69]**
- 1 pediatric patient (**14 years**)
- **Treatment before remission:** 17 patients (94.4%) were in remission after surgery and 1(5.6%) required adjuvant radiotherapy
- **Time of follow-up:** Mean 4.2 years [2.2-5.4]

COMORBIDITIES AT DIAGNOSIS

At diagnosis, 12 patients had hypertension, 3 had type 2 diabetes (T2DM), 6 dyslipidemia and 7 were on psychotropic drugs.

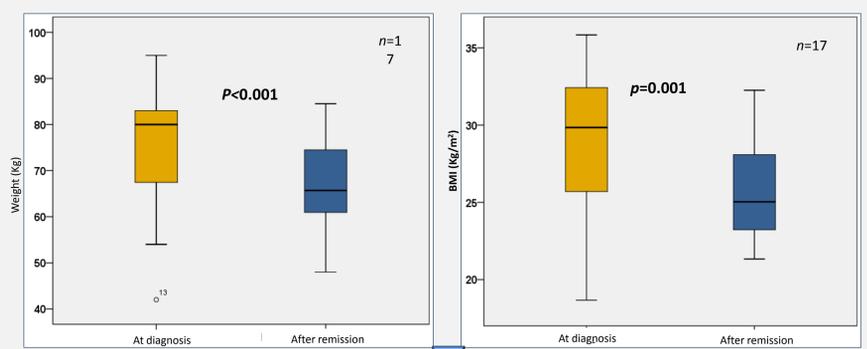
Comorbidity	At diagnosis	After remission
HYPERTENSION		
Anti-hypertensive drugs		
0	6 (33.3%)	14 (77.8%)
1	5 (27.8%)	3 (16.7%)
2	1 (5.6%)	-
3	3 (16.7%)	1 (5.6%)
4	2 (11.1%)	-
7	1 (5.6%)	-
TOTAL (with drugs)	12 (66.7%)	4 (22.2%)
	8 discontinued therapy (66.7%)	4 ↓ dosage (33.3%)
DIABETES		
Oral antidiabetic drugs		
0	15 (83.3%)	15 (83.3%)
1	1 (5.6%)	2 (11.1%)
2	2 (11.1%)	1 (5.6%)
TOTAL (with drugs)	3 (16.7%)	3 (16.7%)
Insulinotherapy		
0	17 (94.4%)	18 (100%)
1	1 (5.6%)	-
	1 patient ↓ dosage of oral drugs and discontinued insulin (22.2%)	
DYSLIPIDEMIA		
Anti-dyslipidemic drugs		
0	12 (66.7%)	14 (77.8%)
1	6 (33.3%)	4 (22.2%)
	3 discontinued drugs (50%)	1 initiated therapy (8.3%)
MOOD DISORDERS		
Psychotropic drugs		
0	11 (61.1%)	15 (83.3%)
1	3 (16.7%)	1 (5.6%)
2	2 (11.1%)	1 (5.6%)
3	2 (11.1%)	1 (5.6%)
TOTAL (with drugs)	7 (38.9%)	3 (16.7%)
	5 discontinued drugs (71.4%)	1 initiated therapy (9.1%)

OSTEOPOROSIS/OSTEOPENIA

Eleven patients (61.1%) underwent initial dual-energy x-ray absorptiometry, 2 had osteoporosis and 4 osteopenia

Diagnosis	At diagnosis	After remission
Osteoporosis	2 (18.2%)	0
Osteopenia	4 (36.4%)	1 osteopenia (9.1%) 1 Normal 2 await reevaluation
TOTAL	6 (54.5%)	≥ 1 (9.1%)

WEIGHT



	At diagnosis	After remission	p
Weight(Kg)	75.4±13.3	67.3±10.2	<0.0001
BMI (Kg/m²)	29.0±4.7	25.8±3.3	0.001

PEDIATRIC PATIENT

	At diagnosis	After remission
BMI (Kg/m²)	31.3 (>P95)	29.1 (>P95)

SUMMARY...

BMI	At diagnosis	After remission
Adult patients		
Normal	3 (17.6%)	8 (47.1%)
Overweight	6 (35.3%)	6 (35.3%)
Obesity class I	7 (41.2%)	3 (17.3%)
Obesity class II	1 (5.9%)	-
Extreme obesity	-	-
Pediatric patient		
Obesity (BMI > P95)	1 (100%)	1 (100%)

Four patients (22.2%) remained obese and 6 (33.3%) overweight!

CONCLUSION

After one year of CD remission, there were significant improvements in hypertension and obesity/overweight. Other comorbidities shown also an improvement, although without statistical significance. Thus, it is crucial to highlight the requirement of maintain surveillance and reassessment of these long-term changes.

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