

The causes of a memory complaint: a series of 442 cases

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Abstract:

Background: The memory complaint results from the subject's awareness of a reduction in their memory skills in everyday situations. There is no correlation between the memory complaint and an objective decrease in memory efficiency in the test situation.

Materials and Methods: We evaluated 442 consultants in our memory consultation for memory complaints and we divided them according to age, the presence or absence of objective memory disorders and according to the etiology highlighted.

Results: 90% of patients are over 50 years old. In 45% of cases, memory performance is normal and this figure can rise to 83% in those under 50 years of age. In 65% of cases; there is an objective memory deficit and the most common etiology is Alzheimer's disease (AD).

Conclusion: In our series, the memory complaint mainly concerns the elderly without any correlation with an objective decrease in memory capacity. Objective deficits are more common in the elderly and are most often related to Alzheimer's disease.

Key Word: Memory; Memory complaint; Dementia; Alzheimer's.

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I. Introduction

The memory complaint results from the subject's awareness of a reduction in their memory capacities in everyday situations; it is a frequent symptom that is encountered in several pathologies and at any age. However, there is no correlation between the memory complaint and an objective decrease in memory efficiency in the test situation.

On the epidemiological level, this complaint takes on a particular importance in the elderly subject because of its frequency and especially of the fear that it would reveal the beginning of an organic cerebral disease, quite particularly of an Alzheimer's disease (MA).

The objective of our work is to determine the meaning of a memory complaint in a population of consultants from our memory unit; is there an objective memory disorder (organic origin) or not (functional origin)? What is the etiology?

II. Material And Methods

This is a descriptive and retrospective study from January 2014 to January 2018, involving 442 patients recruited for the "memory" consultation of the department Neurology of Bab El Oued University Hospital, to explore a memory complaint.

We have specified in all our patients:

- Age;
- The author of the complaint (the patient himself or his entourage)

All our patients had benefited of:

- A psychiatric assessment (looking for anxiety or depression);
- A neuropsychological assessment including at least:
 1. Overall efficiency: MMSE;
 2. Evaluation of memory functions (DMS 48 and RL 16);
 3. Assessment of frontal functions;
 4. Evaluation of instrumental functions.
- A biological assessment including at least:
 1. Complete liver test with amonemia;

2. Determination of vitamin B12 and B9 level;
3. TSH and anti-TPO;
4. Syphilitic and HIV serologies.
 - A brain MRI with sections centered on seahorses and with the following sequences:
 1. Volume 3D T1;
 2. Transverse T2, gradient echo, FLAIR;
 3. Coronal T2;
 4. Diffusion (vascular aspect);
 5. Scoring: Scheltens and Fasekas;

Patients are divided according to the presence or not of objective memory disorders (test performance) and according to age. The patients are then divided according to etiology.

III. Results

Table no 1: Distribution of patients by age:

Age	Number of patients	Percentage
< 50 years	43	10%
> 50 years	399	90%
Total	442	100%

Table no 2: Distribution of patients according to the author of the complaint:

Author of the complaint	Number of patients	Percentage
The patient himself	344	78%
Entourage	98	22%
Total	442	100%

Table no 3: Distribution of patients according to the presence or absence of objective memory disorders and by age:

	< 50 years Number / Percentage	> 50 years Number / Percentage	All the patients Number / Percentage
Normal performance	40(93%)	248 (62 %)	288 (65%)
Performance decrease	03(7%)	151 (38%)	154 (55%)
Total	43(100%)	399(100%)	442(100%)

Table no 4: Distribution of patients with normal performance on Memory Tests, by cause:

Causes	Number of patients	Percentage
Physiological brain aging	74	26%
Anxiety	163	57%
Depression	51	17%
Total	288	100%

Table no 5: Distribution of patients with reduced performance on Memory Tests, by cause:

Causes	Number of patients	Percentage
MCI (mild cognitive impairment)	09	6%
Alzheimer's disease	82	54%
Vascular dementia	32	21%
Mixed dementia	16	10%
Dementia with Lewy bodies	6	4%

Fronto-temporal lobar dementia	4	2%
Other	5	3%
Total	154	100%

IV. Discussion

In our series, the complaint concerns more frequently subjects aged 50 years and over; which joins the data of the literature. In fact, all the studies agree to emphasize the increase in the frequency of memory complaints with age (3, 4, 1). Ponds' study in 1998 showed that judgment of a decline in memory function began at age 50 and that its frequency increased steadily with age (3). In addition, in most studies, the frequency of complaints is higher in subjects with low education and in women (2,1,3).

The Our study confirms the lack of agreement between the memory complaint and the memory performance measured during neuropsychological tests, described in the literature; the overall score being much more correlated with scores of depression or anxiety scales than with patients' performance on objective memory tests (5). Indeed, a simple comparison of the much higher frequency of memory complaints compared to that of AD and other dementias shows that the vast majority of elderly subjects who complain of their memory have no organic brain disease.

In our series, patients with objective memory disorders most often suffered from Alzheimer's disease, which converges with data from the literature.

V. Conclusion

The memory complaint most often concerns the aged subject and it is much more correlated with scores on scales of depression or anxiety than with patients' performance on objective memory tests. When it comes from an organic cause, it is most often an Alzheimer's disease.

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