LETTER TO THE EDITOR

Management of patients with Alzheimer’s disease: Change in the current paradigm?

Dear Editor,

The prevalence of dementia is high in people aged over 60 years, around 5–7%, and Alzheimer’s disease (AD) is the most common form (65–80%). Dementia poses a major public health problem, since an increase is predicted in the short term future due to increased life expectancy with the consequent ageing of the population, which will place greater demand on the medical and social services. Paradoxically, at present there is no possibility of a cure for these patients nor is it possible to delay the disease using drugs because the intimate pathophysiology of AD is not known. Current drug therapy does not offer the desired results either in primary or secondary prevention of the disease.

In recent years several studies have been published attempting to cast light on risk factors and preventive factors which might be associated with the development of AD. Table 1 shows these risk and preventive factors, although many of them currently lack a clear association.

Given such an unpromising background, several studies have estimated that if the main dementia and AD risk factors were suppressed (as shown in Table 1, many are modifiable risk factors) its incidence might be reduced to a third. These optimistic and reassuring data have encouraged investment in research into both individual and social (public health) preventive aspects of AD in the United States and the European Union.

Three large studies on the subject are underway in 3 European Union countries (Finland, Holland and France), under the supervision of the European Dementia Prevention Initiative.

Table 1 Main Alzheimer’s disease risk and prevention factors.

<table>
<thead>
<tr>
<th>(A) Risk factors</th>
<th>(B) Protective factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, sex, skull size, maternal education, genetic factors</td>
<td>Physical activity, continuing education, intellectual and social activity</td>
</tr>
<tr>
<td>Epigenetic factors (environment-gene interaction)</td>
<td></td>
</tr>
<tr>
<td>Partially modifiable</td>
<td></td>
</tr>
<tr>
<td>Foetal risk factors: maternal hyponutrition</td>
<td></td>
</tr>
<tr>
<td>Risk factors in infancy and adolescence: low educational and/or socioeconomic level, obesity</td>
<td></td>
</tr>
<tr>
<td>Risk factors in adults and the elderly: obesity, diabetes mellitus, arterial hypertension, smoking, arteriosclerosis, stroke, heart disease, serious cranial trauma, social isolation and environmental toxins</td>
<td></td>
</tr>
<tr>
<td>Modified</td>
<td></td>
</tr>
</tbody>
</table>

Source: Anstey et al.3

The Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER) is a randomised study with more than 1000 participants with a follow-up period of 7 years and introduces varied actions (nutritional, cardiovascular risk factors and others).

The Prevention of Dementia by Intensive Vascular Care (preDIVA) study is promoted by the University of Amsterdam and comprises a cohort of more than 3500 participants with a 6-year follow-up period. The control group participants are treated routinely, whereas the intervention group participants are subjected to specific therapy, where a team of nurses and pharmacists monitor the drug therapy, lifestyle and cardiovascular risk factors.

The French Multidomain Alzheimer Prevention study (MAPT) is conducting a 3-year intervention and subsequent 5-year follow-up with a cohort of 1600 patients aged over 70 years, principally with advice on nutrition and physical activity.

Within this context, given that conclusive results from the large studies underway are lacking, it would seem that AD prevention should currently be borne in mind by all healthcare professionals in intimate and daily contact with patients who have been diagnosed with AD and those who

Table 1. Main Alzheimer’s disease risk and prevention factors.


2530-299X/© 2016 Sociedad Española de Enfermería Neurológica. Published by Elsevier España, S.L.U. All rights reserved.
have not. Control of probable risk factors and/or prevention factors (education, physical activity, vascular and lifestyle, smoking and other prevention factors) should take place from infancy, the period of major brain growth.

For all of these reasons, we consider it important that all healthcare professionals, including pharmacists and nurses, should be aware of a possible paradigm shift in the management of patients with AD and the importance of health education for the general population, not only in the prevention of cardiovascular disease, but also the to-date less evident diseases such as dementia, more specifically AD, for the benefit of present and future patients.

References


Cristóbal Gallego Muñoz\textsuperscript{a,}*, Nieves Guerrero Navarro\textsuperscript{b}

\textsuperscript{a} Farmacia Hospitalaria, Hospital Sierrallana, Torrelavega, Cantabria, Spain
\textsuperscript{b} Enfermería, Hospital Nuestra Señora de la Merced, Osuna, Sevilla, Spain

*Corresponding author.
E-mail address: toba.gallego@hotmail.com (C. Gallego Muñoz)