Amyloid reducing therapies: Do they still have a future?

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There is widespread recognition in the urgency to understand the causes and mechanisms of senile dementia. Attempts to find cures for Alzheimer's disease (AD) have, however, failed so far, in spite of enormous investments, intellectual and financial. We therefore have to reconsider the problem from new angles. AD is regarded as a disease because of its clinical manifestations and underlying pathology. However, this combination does not define a disease but rather a syndrome, in analogy with hepatic cirrhosis in which liver pathology causes metabolic changes, but which can result from many different etiologies. It is unlikely that attacking a downstream phenomenon, like apoptosis or β -amyloid accumulation, can cure AD, or prevent the progression of the disease.

It is probable that senile dementia is the result of a combination of several processes, working differently in each person. Epidemiological studies have identified many risk factors for "senile dementia of the Alzheimer type", some genetic but most environmental and thus modifiable. Therefore a concerted action to fight the dementia epidemic must be made by aggressive action against its risk factors, and this battle must begin in midlife, not in old age.