

# Dementia

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## INTRODUCTION

We believe the the importance of Alzheimer's disease is underestimated, especially as an underwriting impairment. A recent case is illustrative.

A 39-year-old man recently applied for a large amount of life insurance. It was noted incidentally that this man was on Hydergine, an ergoloid medication which is used to improve declining mental capacities. Upon questioning the attending physician further, it was brought out that the proposed insured had Alzheimer's dementia. For patients who are less than 40 years old who have Alzheimer's disease, the mean survival is only 2.8 years,<sup>1</sup> markedly less than most cancer patients.

## DEMENTIA

Dementia is a total disruption of personality which affects intelligence and behavior. The hallmark of the disease is an astonishing loss of ability to remember recent events. The first symptom is most often a memory disorder, followed by a slowly progressive and unremitting decline in cognitive abilities. Many people in the late stages of dementia cannot remember talking to you just minutes before. There are several causes for such a marked mental decline. For example, Alzheimer's disease is usually thought to contribute to over 50 percent of cases of dementia, with multi infarct dementia a factor in about one third, and other causes (brain tumors, hypothyroidism, depression) in about 15 percent.

Dementia is common: It affects an estimated nearly 5 percent of people over 65 years of age and almost 20 percent of those in their ninth decade.<sup>1,2</sup> One study suggests that of ambulatory, functioning persons who were 75 to 85 years old, new cases of dementia were found to occur as frequently as heart attacks, and new cases of Alzheimer's disease occurred more frequently than strokes.<sup>3</sup> Alzheimer's disease is a major risk among the elderly, which has only recently been unmasked by increasing human longevity, heightened clinical and

scientific interest, and increased public awareness. It is important to emphasize that Alzheimer's disease is not a natural consequence of growing older, nor is it exclusive to the elderly. Alzheimer's disease is marked by specific neuropathologic changes in the brain which are not present in the normal non-demented elderly. These changes may contribute to the symptoms of dementia<sup>4</sup> and to decreased life expectancy.<sup>1,2</sup> No treatment has been found to be successful, though many attempts are being made.

The association between Alzheimer's disease and early mortality is strong. This association has been obscure in the past because death statistics are generally based on only one entity, "the underlying cause of death". However, one diagnosis seldom conveys the full circumstances of death. This is especially true for chronic diseases that may not be fatal but, in combination with other diseases, may increase the risk of death. This indirect contribution to death is often clinically observed in conditions such as chronic kidney disease, rheumatoid arthritis, or depression. For example, a patient with Alzheimer's disease may have difficulty feeding, thus causing aspiration and pneumonia.<sup>5</sup>

Many conditions are found in higher frequency among patients with Alzheimer's disease: Infections, trauma, nutritional deficiency, chronic ulcer of skin, foreign body in pharynx, cataract, glaucoma, blindness, deafness, Parkinson's disease, and epilepsy.<sup>6</sup> The leading causes of death in people with dementia were diseases of the heart (33.4%), cerebrovascular disease (12.9%), influenza and pneumonia (10.4%), and arteriosclerosis (4.5%).

The predisposition to early mortality is dependent upon the age of onset of dementia. Patients who have Alzheimer's at 40 years old have a mean survival of 2.8 years, while those in their 60's or 70's have a mean survival of 7 to 8 years. As a major mortality factor, Alzheimer's disease has been implicated as the fourth leading cause of death.<sup>2</sup>

The implications to the life insurance industry are staggering. The elderly market is large and growing rapidly. In 1983, 17 percent of life insurance purchasers were over age 45, up from 11 percent just ten years prior.<sup>7</sup> In 1985,

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at Bankers Life alone, we underwrote close to one billion dollars of insurance on people over 50 years old. In 1980, the number of Americans over the age of 65 had reached 25 million, or 11 percent of the population. This percentage is projected to increase to 18 percent by 2020, and may account for nearly a quarter of the total population by the year 2050. Of this elderly population, 5 to 20 percent may be at risk for developing a severe dementia syndrome,<sup>1</sup> causing enormous suffering and a huge burden on families and health care facilities. Even today, about one half of all nursing home patients have dementia.

Though the elderly have not been a segment of the population targeted for life insurance marketing, the increased wealth and numbers of the elderly may make this group a lucrative market. As the number of applications increase from these elderly proposed insureds, our underwriting should be increasingly aware of the special problems of the elderly.

#### WHAT THE UNDERWRITER SHOULD LOOK FOR

In the application file, the most important clues for the practical underwriter are suggestive symptoms, medications, and risk factors. When the major reason for an office visit is a striking loss of memory, the underwriter should seek further confirmation that the proposed insured does indeed have senile dementia of the Alzheimer's type. Because decline in cognitive ability and "forgetfulness" are highly subjective and extremely common, underwriters may miss the importance of these symptoms.

The terms "Alzheimer's disease", "senile dementia of the Alzheimer's type (SDAT)", or "organic brain syndrome (OBS)" may be used, almost interchangeably, by physicians in describing these symptoms. Hydergine, an ergot compound, is commonly given for dementia. Risk factors are not well defined in dementia though family history is important: The more positive the history of Alzheimer's in the family, that is, the more members of the family affected, the higher the risk. Both sexes are

affected about equally. No laboratory data are specific, though CT studies of the brain can show somewhat increased ventricular size. A recent paper suggests that an easily given cognitive skills test can be helpful in making the diagnosis.<sup>8</sup>

#### CAVEAT

While we believe increased vigilance of the underwriter for Alzheimer's will result in significantly improved claims experience, the diagnosis of Alzheimer's is only definitively made after the fact (after autopsy). There are a number of causes, significant and insignificant, which can manifest themselves in dementia-like symptoms. Clearly, the prognosis is different for patients with Alzheimer's disease, brain tumors, hypothyroidism, depression, medication mis-dosage, and simple aging. Nonetheless, from an underwriting and medical point of view, many of these disorders can lead to a decreased life expectancy. Therefore, the symptoms of dementia should engender a thorough evaluation.

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