

Medicine by John Grauerholz, M.D.

New hope for Alzheimer's Disease

One of the first results of Dr. Aroonsakul's work was a test which reliably distinguishes true Alzheimer's from senile dementia.

Dr. Chaovanee Aroonsakul of Chicago, a specialist in neurological diseases of the elderly or neurogerontology, has developed a treatment which appears to actually reverse the symptoms of Alzheimer's Disease and other aging related degenerative diseases of the central nervous system.

Alzheimer's Disease, or Senile Dementia Alzheimer's Type has been called "The Disease of the Century" because of the number of persons expected to be afflicted by the year 2000. This was before the full impact of the worldwide AIDS epidemic was appreciated, but even so, chronic degenerative diseases of the central nervous system, of which Alzheimer's Disease is the most widely known, may give AIDS a close race over the near-term as far as economic impact is concerned.

At the present time, it is estimated that between 1.5 and 2.5 million persons over the age of 60 years are afflicted, and Alzheimer's Disease is believed to be the fourth leading cause of death in the United States. According to data presented in 1983, the U.S. government spent more than \$27 billion to cover medical costs associated with the care of patients with Alzheimer's Disease.

If the present trend continues, the annual cost of medical care for this condition will be \$80 billion.

Alzheimer's Disease was first identified as a distinct clinical entity by Dr. Alois Alzheimer in 1906, although a French physician, Dr. Jean Etienne Esquirol, had described the symptoms of the disorder in 1838.

Classically it was characterized by the onset of a rapid progressive decline in all mental functions in persons in their late forties to early fifties.

The course from onset of symptoms to death was between three to five years and was accompanied by severe general physical deterioration.

Because of the relatively early onset of symptoms, it was also known as pre-senile dementia to distinguish it from the relatively later onset, and slower course, of senility or senile dementia. Senile dementia is a condition in the elderly manifested by slow deterioration of intellectual capacity, beginning in the sixties or seventies and generally leading to death within 10 to 15 years. While senility is the most common illness among the elderly, it is not a normal sign of growing older.

More recently, there has been a tendency to group both pre-senile and senile dementia together as Alzheimer's Disease. It is this lumping together which is primarily responsible for the sudden emergence of a previously rare disease into a leading cause of morbidity and mortality.

One of the more ominous results of this has been to assign the rapidly fatal, and hopeless, prognosis of classical Alzheimer's Disease to any individual manifesting symptoms of senility, however mild. This in turn has fed a growing movement to abate the cost of caring for these people by starving them to death, since they are going to rapidly become vegetables anyway.

One of the first results of Dr. Aroonsakul's work was, in fact, to de-

velop a biochemical test which reliably distinguishes between true Alzheimer's Disease and senile dementia. The test, known as the Aroonsakul and Alan Provocative Test measures the ability of the patient to secrete certain growth factors in response to a chemical stimulus. Patients with senile dementia will show a diminished response, whereas those with Senile Dementia Alzheimer Type will show almost no response.

Dr. Aroonsakul's treatment consists of replacing the missing growth factors, along with certain hormones. Because of proprietary considerations, the specific hormones and growth factors will not be named. One of their major mechanisms of action, however, is that they enhance the process of DNA repair, whereby the structural integrity of the DNA molecule is maintained.

Because these agents act systemically, and not just in the brain and nervous system, patients tend to show cessation, and reversal, of aging changes in other systems, such as the skin.

While patients with Senile Dementia Alzheimer Type have been generally refractory to therapy, and most of the currently used medications seem to only temporarily arrest symptoms in milder cases, Dr. Aroonsakul's treatment has produced reversal of symptoms even in severe cases, and almost total return of neurological function in patients with illness of less than three years' duration. Some patients with senile dementia have been able to return to productive work!

At present, the cost of the treatment is \$24,000 for the first year and \$22,000 a year for the second and third years. The majority of this cost is for the medication. While this may seem expensive, custodial care for an Alzheimer's patient can run from \$30,000 to \$100,000 a year.