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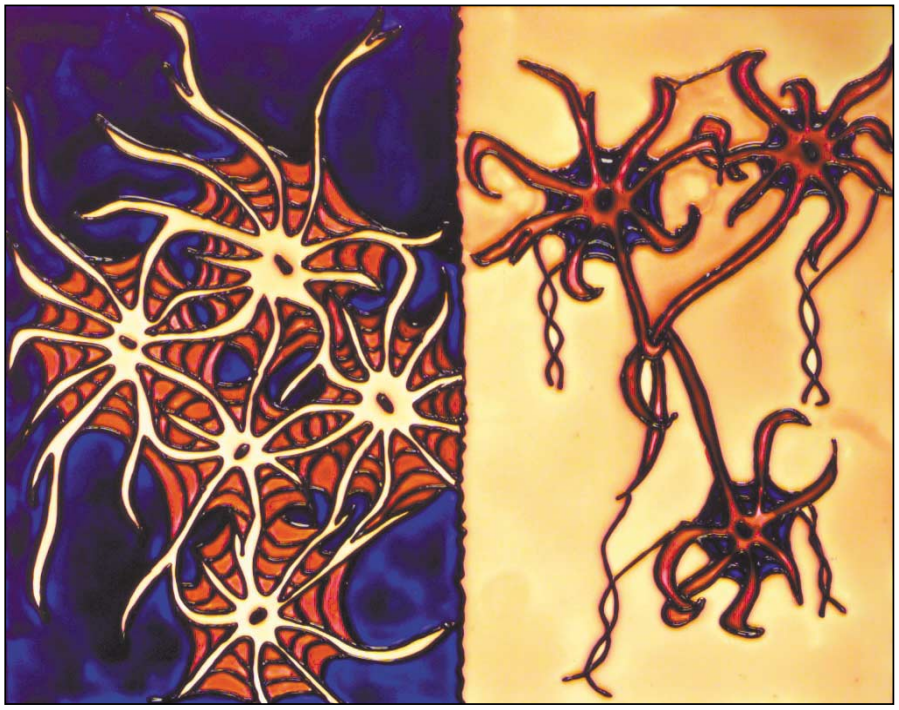

Art by Sandhya Satyanarayana

On the Cover

Entanglement by Sandhya Satyanarayana (Oil on glass)

Memories reassure an individual that a life has been lived; they provide proof of both accomplishments and mistakes. I chose to represent both intact and tangled spider's webs to contrast the impact that Alzheimer's disease has on the neural connections within the brain. Like the web defines the spider, memories help define the person.

In this work, interconnected neurons form the foundation of the webs, illustrating how memories collected throughout a lifetime are remembered through the various associations made by the mind. The fragility of this neural network is often taken for granted, with the belief that nothing can take away the contents of the brain once they have been implanted.

The reality of Alzheimer's disease has proven this to be a misconception. As the disease progresses, the connections within the network are lost. The web has become tangled and a lifetime of lessons learned have been lost.

We'd Like to Hear From You!

The Canadian Alzheimer Disease Review welcomes letters from its readers. Address all correspondences to Letters, *The Canadian Alzheimer Disease Review,* 955 Boul. St. Jean, Suite 306, Pointe Claire, Quebec, H9R 5K3. *The Review* also accepts letters by fax or electronic mail. Letters can be faxed to 514-695-8554 and address electronic mail to russellk@sta.ca. Please include a daytime telephone number. Letters may be edited for length or clarity.

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Looking Back and Moving Forward

by Peter McCracken, MD, FRCPC

Quite recently, the Editorial Board of The *Canadian Alzheimer Disease Review* convened its annual meeting with our publisher, STA Communications. As per protocol, board members were updated with cumultative results from numerous polls regarding the satisfaction and opinions of our consumers. Reader satisfaction levels were strong, with 90% expressing high satisfaction with the content of the *Review*. The same percentage of readers reported they would continue to read the *Review,* and would recommend it to others.

In addition to learning about new topics sought after by our readers, the Editorial Board resolved to feature a "Research Update in Alzheimer's Disease" with each edition of the *Review*. Another resolution was to include a regularly appearing column to highlight a given local initiative (either institutional or community-based) that aims to enhance the care of patients with Alzheimer's Disease and other dementias or improve caregiver support.

The piece by Judith Cohen in this edition (page 9) is such an article. It articulates the establishment of a hospital-based committee, "The Hopeful Care for the Cognitively Impaired," whose aim is to develop interdisciplinary solutions to improve quality of care at Ste-Anne's Hospital in Ste-Anne-de-Bellevue, Quebec.

Another highlight of this issue is the contribution by noted Dr. Andrew Kertesz (page 5), which clarifies the muddy waters of terminology pertaining to the frontal lobe- and temporal lobe-dementing disorders. Dr. Kertesz notes the overlap of these disorders, as well as their variable combinations with aphasic difficulty, extra pyramidal findings and motor neuron disease manifestations.

As well, in the second part of the article "Depression and Dementia: What Clinicians Need to Know" (page 18), Dr. Bernard Groulx places particular emphasis on the high risk of suicide in this subgroup of patients. The danger zones of depression are related, as are the important tenets of non-pharmacologic treatment.

The Alzheimer Society (page 22) adds its typically valuable effort with viewpoints from individual patients with early dementing disorders as well as comments from knowledgeable caregivers. The article points out the value of early support groups run by local Alzheimer Societies throughout Canada.

The Editorial Board's meeting concluded with the resolution to continue to strive for excellence in the content of future issues of the *Review*.

Peter N. McCracken

Pick Complex: Cutting Through the Confusion About Pick's Disease and Frontotemporal Dementia

Evolving diagnostic techniques have resulted in increasing rates of diagnoses of such conditions as frontal and temporal atrophy. However, recognizing and distinguishing the clinical syndromes of these and related conditions remains difficult. Better understanding of these conditions may begin with the use of new terminology to classify and link such conditions.

by Andrew Kertesz, MD, FRCPC

Dr. Kertesz is Professor, Department of Clinical Neurological Sciences, University of Western Ontario, and Director, Cognitive Neurology and Alzheimer Research Centre, St. Joseph's Health Care — St. Joseph's Hospital, London, Ontario.

The term "Pick's disease" (PiD) is used to designate clinically defined cases of progressive frontal and temporal degeneration, as was described by Arnold Pick,[1] or a pathological entity defined histologically by the presence of argyrophilic globular inclusions (Pick bodies) and swollen achromatic neurons (Pick cells). Pick's initial case of a progressive aphasic patient with a behavioral disturbance, and his subsequent cases of frontal lobe dementia and aphasia, included only anatomical examination. The histologic description came later.

It also became apparent that cases of clinical PiD with frontal and temporal lobe atrophy may not show the typical histological picture on autopsy. After reviewing a large series of their own, Constantinidis et al[2] classified PiD as: a) with Pick bodies; b) only with swollen neurons; and c) only gliosis and neuronal loss. They felt that, "in spite of the dissimilarities between these forms, considering the absence of sufficient knowledge about pathogenesis, it seems prudent at present to maintain the uniqueness of Pick's entity." Many subsequent publications of PiD were based on post-mortem findings, and variable clinical features were available retrospectively. This gave rise to the notion that PiD is difficult to diagnose *in vivo*.

Frontotemporal Dementia (FTD)

With the development of neuroimaging, frontal and temporal atrophy was demonstrated with increasing frequency *in vivo*. However, instead of shifting the diagnosis of PiD back to the clinic, more recent studies applied new labels such as dementia of the frontal lobe type, or frontal lobe dementia (FLD). The groups who described dementia of the frontal lobe type further changed the terminology to frontotemporal degeneration (FTD).[3] Both of these groups recognized that the clinical syndrome was the same whether the cases had Pick bodies or only neuronal loss and gliosis.

Glossary of Terms

Frontotemporal dementia (FTD). Clinical Pick's disease or Pick complex. Also used for the apathy-disinhibition presentation or the pathology without Pick bodies. Superceded the term "frontal lobe dementia" (FLD). In addition to the apathetic and disinhibited types, the stereotypic compulsive type is distinguished at presentation.

Pick bodies. Round argyrophilic compact inclusions in the dentate gyrus and the neocortex. They are considered the defining feature of Pick's disease by some, but there is a variety of inclusions in Pick complex and sometimes there are no inclusion bodies, yet the clinical syndrome is the same.

Pick cells. Ballooned neurons. This is a feature of all varieties of the Pick complex, which was originally described with Pick's disease but later also as a cardinal feature of corticobasal degeneration (CBD). Superficial cortical layer spongiosis, gliosis, and neuronal loss also are present in all varieties.

Primary progressive aphasia (PPA). This presenting syndrome also is part of the Pick complex or clinical Pick's disease. It also has a variety of pathologies just like FTD. By definition, the patient has slowly progressive aphasia before anything else develops. Initially anomic speech becomes increasingly nonfluent.

Semantic dementia. Semantic aphasia, or a fluent type of transcortical sensory aphasia where the patient has difficulty with comprehension and naming, with well preserved fluency and syntax. The loss of meaning extends to visual stimuli.

Corticobasal degeneration (CBD). The extrapyramidal variety of Pick's disease. Clinically defined as unilateral extrapyramidal symptoms, apraxia and the alien hand syndrome, but many of these patients develop features of FTD and PPA and often present with cognitive syndromes. Therefore, the pathological entity of CBD, as well as the clinical syndrome of CBDs, are also part of the Pick complex.

Progressive supranuclear palsy (PSP). Recently recognized relationship to CBD pathologically, genetically, and clinically is considerable but controversial.

Motor neuron disease type of dementia (MNDD). This was initially described as a separate entity with unique inclusions, tau- and synuclein-negative, ubiquitin-positive (ITSNU), but there is considerable overlap between these cases and other members of the Pick complex. Not all cases have the typical inclusions, and ITSNU is seen without MND.

FTDP-17. Frontotemporal dementia and Parkinsonism linked to chromosome 17. Most of these families have tau mutations, but some do not, and some have tau-negative pathology.

Pick complex. Clinical Pick's disease encompassing all the syndromes of FTD, PPA, CBD, and all the pathological varieties, including Pick's disease, CBD, dementia lacking distinctive histology (DLDH), and MNDD.

They estimated the incidence at 20% of degenerative dementias. The emphasis was on behavioral disturbances, and FTD is now used to refer to the syndrome of apathetic-disinhibition dementia and as a synonym for PiD.

Primary Progressive Aphasia (PPA)

A similar instance of relabelling PiD occurred with the description of PPA as a separate entity.[4] However, many subsequent (and preceding) cases of PPA were described with Pick bodies. Other cases had histology characterized by gliosis, neuronal loss and layers II and III spongiosis in the cortex identical to that described in FLD, and subcortical involvement with neuronal achromasia similar to CBD.[5] The nonfluent variety of PPA often leads to mutism undistinguishable from that seen in FLD. Other modalities are affected subsequently, particularly behavioral changes suggesting frontal deficit. At times, extrapyramidal complications and motor neuron disease (MND) appears. An interesting variety is characterized by preserved fluency and syntax, with loss of semantics, called "semantic dementia."[6]

Corticobasal Degeneration Syndrome (CBDs)

There have been many case descriptions of PiD in which patients had prominent extrapyramidal features. It was recognized that subcortical changes occur in PiD, even without extrapyramidal symptomatology. When Rebeiz et al[7] described corticodentatonigral degeneration, they recognized the similarity of the pathology to PiD. Subsequently the extrapyramidal apraxic syndrome with variable gaze palsy and the "alien hand" was relabelled corticobasal degeneration (CBD)[8] or corticobasal ganglionic degeneration (CBGD). Most patients with CBD develop a language disorder resembling PPA and FTD with considerable overlap of the syndromes. It is recognized that the pathological and clinical descriptions of CBD do not fully match. Therefore, it would be useful to

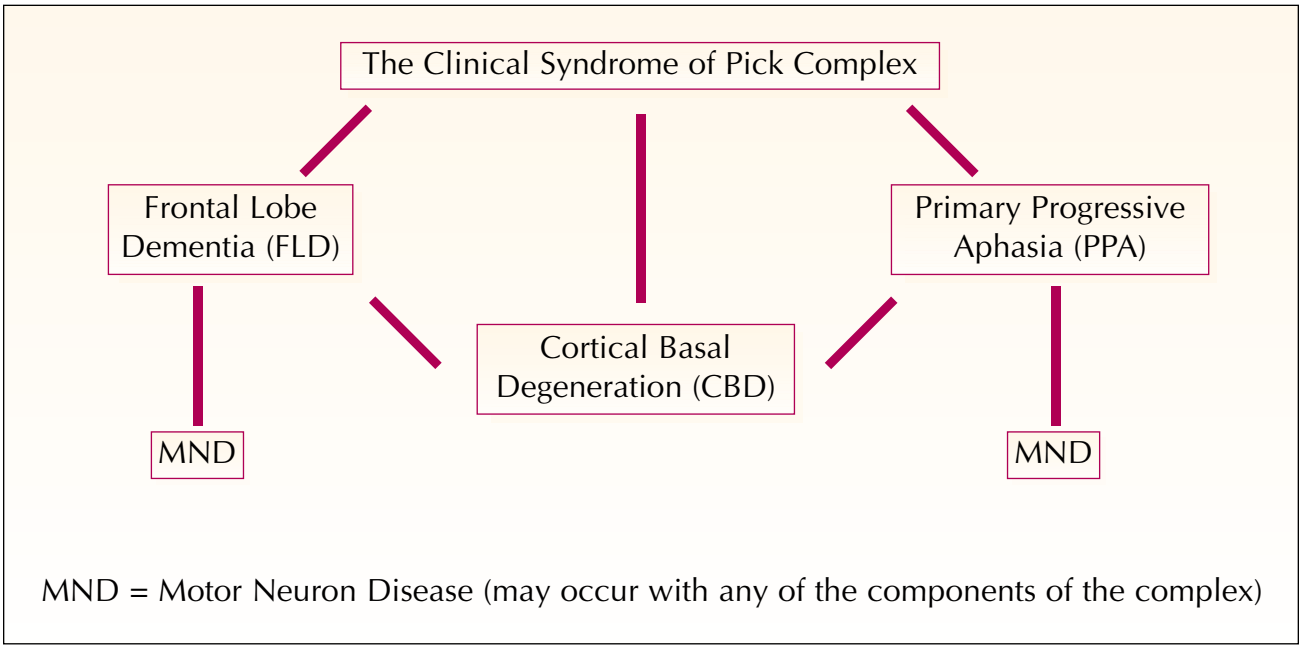

Figure 1. The unifying concept of Pick complex.

distinguish the clinically appearing extra-pyramidal apraxic syndrome, corticobasal degeneration syndrome (CBDS), from CBD pathology (see below).

Dementia with ALS (Motor Neuron Disease Type of Dementia)

Recently, a great deal of interest has been shown in the association of dementia with Motor Neuron Disease (MND). Initially, this was described with Creutzfeldt-Jakob disease, but it now appears many of these were not instances of prion protein disease but cases resembling FTD with spongiform changes in the superficial cortical layers. There is a burgeoning literature approaching this issue, from the point of view of FTD and PPA developing MND, as well as MND associated with dementia. Recently, it was suggested that cases of FTD with MND have specific neuronal inclusions, tau- and synuclein-negative, ubiquitin-positive (ITSNU). The specificity of this, however, has been challenged by several descriptions of this pathology without MND and several other cases of PiD or FTD with MND but without ubiquinated inclusions.

Neuropathological Varieties

Until recently, the presence or absence of Pick bodies and ballooned neurons, and their distribution, were used to establish subgroups. The differential staining with phosphorylated epitopes, tau, ubiquitin αB crystallin and Gallyas have more or less distinguished the following varieties of pathology:

1) Pick body dementia defined by the presence of argyrophilic tau immunoreactive Pick bodies in the dentate gyrus of the hippocampus, as well as other neocortical and subcortical sites with ballooned neurons (Pick cells), gliosis and spongiform change in the II and III layers of cortex (PiD);
2) Gliosis and neuronal loss with or without spongiosis or the presence of ballooned neurons in the deep layers, also known as Dementia Lacking Distinctive Histology (DLDH);
3) CBD type of pathology characterized by ballooned neurons, Gallyas-positive and tauimmunoreactive astrocytic plaques, argyrophilic threads in the white matter, cortex and basal ganglia, and globose or ring-like neurofibrillary tangles in the substantia nigra (corticobasal inclusion bodies) (CBD);
4) Cytoplasmic inclusions, tau- and synuclein-negative, ubiquitin-positive in the dentate and other cortical and subcortical sites with or without MND, as described above.

Since these variations overlap in morphological features and their distribution, and are not specific to any of the clinical phenotypes, it is premature to regard them as distinct entities.

Pick Complex

We suggested the term "Pick complex" to avoid the confusion that continues to surround the terms PiD and FTD.[5] Pick complex is a unifying concept of the overlapping clinical syndromes of FTD, PPA, CBDS, and the underlying neuropathological findings, emphasizing commonalities rather than differences between them. It designates both the pathological and the clinical overlap, avoids the restriction of pathology and clinical symptomatology to the frontotemporal cortex, and acknowledges the relationship to PiD (Figure 1). The terms "frontotemporal degeneration" and "frontotemporal dementia" do not include the frequent subcortical involvement, parietal pathology and extrapyramidal symptomatology and association with MND. Furthermore, use of the term FTD creates confusion because this term designates the behavioral presentation of the syndrome or the whole syndrome including the aphasic presentation (PPA). A similar confusion has been associated with the use of PiD, and has led to the under-diagnosis of both conditions.

Treatment

The treatment of PiD has not been established. Zinc metabolism was considered abnormal at one time, but chelation therapy was not successful. More recently, symptomatic treatment of restless, compulsive behaviors with selective serotonin reuptake inhibitors (SSRIs) or trazodone in FTD has been considered useful. Lithium also has been tried in a few patients, because it may have an effect on tau dephosphorylation, but the results have been poor.

Pick complex is a unifying concept of the overlapping clinical syndromes of FTD, PPA, CBDS, and the underlying neuropathological findings, emphasizing commonalities rather than differences between them.

Genetics

Recent evidence of genetic linkage to chromosome 17 q21-22 of several large families with a significant resemblance to Pick complex has emerged.[9] The chromosome region common to all these contains the gene for the microtubule stabilizing protein tau. More than 20 tau mutations have been identified with various phenotypic manifestations. This genetic finding adds considerable support to the unity of this syndrome, and suggests a possible pathogenesis. Recent biochemical fractionation of tau protein may account for some of the variations in pathology and clinical manifestations, but it is too early to link the subtypes to clinical patterns. Gene mapping, biochemical and histochemical distinctions provide further understanding of the syndrome, but we must be careful not to lose sight of the clinical, pathological, and genetic cohesiveness, or of the exercise of caution in interpreting the differences.

Summary

The diagnosis of FTD, or Pick's disease, is made when a patient, usually under the age of 70 years, has a history of disinhibition, "frontal" dementia or primary progressive aphasia and imaging shows frontotemporal atrophy. Tertiary referral is advisable.

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Alzheimer Care Training for Everyone: A Multidisciplinary, Inter-Service Approach

Patients with Alzheimer's disease and other dementias are affected by interaction with all personnel of a healthcare facility setting. This article outlines an educational training program developed at one Canadian hospital to ensure that all staff become sensitive to and knowledgeable about caring for and interacting with such patients.

by Judith Cohen, BScN, MN

A recent study at Ste-Anne's Hospital in Ste-Anne-de-Bellevue, Quebec, indicated that 80% of our patient population suffer from cognitive deficits due to dementing illness.[1] In response to this dramatic increase in the number of residents with Alzheimer's disease (AD) and related disorders, St. Anne's formed a hospital committee called Hopeful Care for the Cognitively Impaired (HCCI). The HCCI mandate was to study the needs of Ste-Anne's residents suffering from dementia and suggest solutions to improve care and quality of life for these patients.

With the exception of two closed units (which house 44 residents in the intermediary to end stages of AD who present problems with wandering) our residents can be found on all medical and psychiatric wards. Most circulate freely throughout the hospital, which we consider to be their *milieu-de-vie*. Consequently, they come into daily contact not only with their own caregivers but with a host of non-professional staff, volunteers and visitors who undoubtedly have an impact on their quality of life.

A survey conducted by the HCCI in 1997[2] revealed that all professional and non-professional staff and volunteers desired to increase their knowledge of dementing illnesses in order to feel more comfortable around this clientele. They expressed the need to improve their communication skills with this population, to know what to do when faced with problem behaviors, and how to prevent and manage "catastrophic reactions." The findings of the survey led to the HCCI recommendations (Table 1) summarized as follows:[3]

- The training program should be offered to all hospital personnel of all services.
- Programs for the different sectors should be adapted according to the variations in the frequency and the type of contact each sector's employees have with residents suffering from dementia.
- Programs for the different sectors should be adapted to the level of background knowledge and previous educational training received by, staff in each sector. Particular urgency should be given to the services of recreology, arts and crafts and salubrity, as staff in these services have frequent contact with AD residents and have expressed an urgent need for such training.
- Programs should incorporate a variety of teaching tools and methods.
- Pedagogical material should cover the collective needs expressed by the different sectors.
- Educational training should be diffused to meet the diverse needs of all hospital personnel.

As a result of these expressed needs, our hospital directorate approved the development and diffusion of the educational training program described below (composed of four sub-programs present-

Ms. Cohen is a nurse clinician in psychogeriatrics, Hôpital Ste-Anne, Ste-Anne-de-Bellevue, Quebec.

Table 1

HCCI Recommendations for Multidisciplinary Alzheimer Care Training Program

- Offer program to all personnel of all services
- Adapt programs for each sector:
  - frequency/type of contact with AD patients
  - level of knowledge/educational training
- Incorporate variety of teaching tools and methods
- Pedagogical material should cover needs of each sector
- Diffuse training to meet needs of all personnel

ed here as programs A, B, C, & D). Learning objectives, course content and pedagogical materials were developed and selected to be appropriate for these four groups.

Program A

Target participants. Staff in these services have (for the most part) received education and training. They need to increase and update their knowledge on dementing illnesses and therapeutic practices. They need to improve their skills in preventing and dealing with behavior problems associated with this clientele. Targeted staff members to benefit from this program include:

- Nurses, head nurses
- Day center staff
- Occupational therapists
- Physiotherapists
- Dietitians
- Psychologists
- Social services staff
- Pharmacists
- Inhalation therapists
- ECG staff
- Dentists
- Psychiatrists
- Medical staff

Purpose and goals. To assure the highest quality of care to our residents suffering from AD and related disorders and their families within a multidisciplinary context. The goals of this program include:

- To update knowledge on dementing illness for all nursing staff and professional services.
- To improve the skills of the multidisciplinary teams to develop individualized care plans for each resident based upon his/her capacities and incapacities in order to maximize his/her potential and promote autonomy.
- To improve multidisciplinary team members' communication with residents suffering from dementia and maximize quality social interaction.
- To familiarize multidisciplinary team members with the therapeutic approaches described in the literature (e.g., reality orientation; sensory stimulation; validation; reminiscence).
- To provide multidisciplinary team members with strategies for preventing and dealing with behavior problems commonly encountered with this clientele, including "catastrophic reactions."
- To update multidisciplinary team members' knowledge of the most frequently prescribed medications for dealing with behavior problems, including contraindications and side-effects.
- To increase multidisciplinary team members' awareness of of the needs of families who have a loved one institutionalized with AD.
- To familiarize multidisciplinary team members with the elements of an adapted *milieu-de-vie* for this clientele.
- To update multidisciplinary team members' knowledge of current research and treatment of AD and related disorders.

Course content and pedagogical material. All participants receive three days of service-specific training offered by the *centre de consultation et de formation en psychogériatrie* (CCFP). This educational training package covers an exhaustive review of the principal problems encountered in psychogeriatrics, including conceptual models of pathological agitation and neuropsychological and neuro-behavioral processes associated with pathological agitation of an aging clientele with dementia. The rationale for applied intervention strategies in long-term care are illustrated by clinical vignettes. Two accompanying documents[4,5] are provided by the instructors, who also are the authors and persons responsible for developing this material.

All participants receive an additional three days of inservice education covering: the multidisciplinary psychogeriatric assessment; assessment tools; communication techniques; the needs of families of institutionalized members with dementia; the notion of competency; protection regimes; the concept of an adapted *milieu-de-vie*; the use of medications; and current research directions and findings. An extensive list of reading materials (i.e., books, journal articles, information pamphlets, kiosque displays, videos, specific learning activities, case discussions and post-tests) have been compiled on

each subject. Lecture presentations and group discussion animators come from an internal bank of invited speakers.

Program B

Target participants. Staff in these services have frequent contact with residents, are directly involved in patient care and (for the most part) have received no previous training. Targeted staff members to benefit from this program include:

- Nursing orderlies
- Patient cafeteria staff
- Barbers
- Ward clerks
- Radiology technicians
- Laboratory technicians
- Pastoral service staff

Purpose and goals. The purpose of this program is the same as that of Program A. This program's goals include:

- To understand the difference between normal aging and dementia.
- To understand the difference between normal forgetfulness and memory loss related to AD.
- To properly define dementia and describe the stages of AD.
- To enumerate the symptoms and manifestations of AD.
- To observe and respect residents' routines, rhythms, likes and dislikes, interests and particularities.
- To describe residents' capacities and incapacities to perform activities of daily living.
- To describe residents' capacities and incapacities to understand others and express themselves.
- To identify the level of assistance required by residents to perform all activities of daily living.
- To identify particular approaches required to reduce stress and facilitate the tasks of caregivers.
- To improve communication skills with residents suffering from dementia and maximize quality social interaction.
- To provide participants with strategies for preventing and dealing with behavior problems, including "catastrophic reactions."

Course content and pedagogical material. All participants receive two days of service-specific training offered by *l'Association pour la santé et la sécurité du travail secteur affaires sociales* (ASSTSAS). This educational training package covers: the prevention of aggressive or problem behaviors in long-term care facilities with this clientele; an understanding of the origin of aggressive disruptive behaviors; and the application of intervention strategies during caregiving. The accompanying ASSTSAS participant workbook is entitled *Prévention des comportements agressifs perturbateurs en centre d'hébergement gériatrique; Projet session de formation pour les responsables des soins de base.*

All participants receive an additional two days of inservice education training, during which they are required to present their observations of actual case studies (e.g., the resident's life story, rhythm, interests, likes and dislikes). The participant is required to describe the resident's capacities and incapacities to perform activities of daily living and identify the level of assistance needed to compensate for deficits. Participants assist in the development of an individualized care plan, built on the resident's residual capacities. Situational learning activities allow participants to practice acquired communication skills. Pedagogical material includes videos, structured learning activities, animated discussions, group work and class presentations.

Program C

Target participants. Staff in these services have frequent contact with residents and (for the most part) have received little or no training. They need to learn to adapt the suitability of activities and stimulation programs offered to residents with dementia. Targeted staff members to benefit from this program include:

- Recreologists
- Arts & Crafts staff

Purpose and goals. To improve the skills of our animators in order to offer more appropriate activity and stimulation programs to our residents with AD according to the stages of their illness. This program's goals include:

- To appreciate the characteristics of an adapted approach to animating activity groups for individuals with AD.

Programs for the different sectors should be adapted according to the variations in the frequency and the type of contact each sector's employees have with residents suffering from dementia.

- To determine the duration of an activity according to the attention capacity and tolerance of the resident.
- To demonstrate flexibility and simplicity when animating an activity group for residents with AD.
- To identify activities and intervention models specific for persons with cognitive deficits.
- To plan activities based on the resident's strengths.
- To plan activities based on the resident's needs.
- To create an activity program for residents with AD.

Course content and pedagogical material. All participants receive three days of inservice education focusing on adapted animative approaches. Intervention videos, structured learning activities, discussion groups, invited guest speakers, reading materials and kiosques are among the many pedagogical tools used. Three particular documents[6-8] are referred to frequently, as are the videos "*Et s'ils pouvaient encore profiter de loisirs*" (*Institut universitaire de gériatrie de Montréal*) and "In this very room" (Terra Nova Films).

Program D

Target participants. Staff and volunteers in these services do not provide direct patient care. They do, however, have occasional contact with residents, and form an essential psychosocial component of residents' *milieu-de-vie*. They need to feel more comfortable with this clientele. Targeted staff members to benefit from this program include:

- Salubrity staff
- Security staff
- Secretaries and clerks
- Technical services staff
- Computer services staff
- Finances staff
- Medical records staff
- Clinic and sterilization staff
- Human resources staff
- Administrative services staff
- Telephone operators
- Laundry staff
- Kitchen staff
- Hospital management staff
- Volunteer services staff

Purpose and goals. The general purpose of this program is to promote an enriched psychosocial environment for our residents. More specifically, it aims to help all staff recognize and identify their unique personal contribution towards improving the quality of life of our residents suffering from AD and related disorders. This program's goals include:

- To promote a general understanding of dementia and AD.
- To improve participants' ability to communicate with residents with AD.
- To discuss some of the most frequently encountered behavior problems and participate in the prevention and management of these behaviors.
- To enumerate environmental factors responsible for behavior problems and catastrophic reactions.
- To describe environmental factors which promote the well-being of residents with AD.
- To take the necessary measures to modify the environment to render it secure and promote the well-being of residents suffering from dementia.

Course content and pedagogical material. All participants receive a one-day awareness program on AD and related disorders. Lecture presentations, videos, structured learning activities, group discussions and a post-test are among the variety of pedagogical tools used. Most of the material is provided by the Alzheimer Society in the form of pamphlets and handouts.[9] The Alzheimer Society video series, "Alzheimer's disease: Care at Home," also is used.

Participants claim they are more comfortable around patients with dementia after having received the training.

Evaluation of Sub-Programs

A standard questionnaire evaluating participant satisfaction is completed by each participant at the end of each day of formation. Participants claim they are more comfortable around patients with dementia after having received the training. They claim to have a more in-depth understanding of the illness, as well as more compassion and respect for patients' dignity. Evaluation results of participant satisfaction were very high. One follow-up survey indicated an overwhelmingly high percentage of staff felt they are better equipped to prevent and deal with behavior problems following this training. In the same two units involved in this particular survey, 96.6% of staff attested to using measures other than physical or chemical restraints in dealing with behavior problems since having received the training. Furthermore,

100% of this survey's respondents claimed to put into daily practice the concepts and notions acquired from the program.[10]

A remarkable improvement has been observed in the types and quality of activities and stimulation programs being offered by our recreology and arts & crafts departments following this training. A tool is being developed to measure patient outcomes, and should be administered at the end of the program, which is ongoing. To date, approximately half of all employees at Ste-Anne's Hospital have received the educational training program appropriate for their service. As the program is ongoing, a full analysis of the evaluation of the program would be premature.

Summary and Conclusions

Why invest in such an extensive educational training program on dementia for all staff of a geriatric long-term care facility? Research in the nursing literature puts considerable emphasis on evaluating the effectiveness of educational programs on the management of assaultive behaviors, and decreases in the number and severity of assaults have been documented following the implementation of training programs.[11-13] Declines in numbers of missed work days, and in costs to the system, also have been reported following such training.[14] Other research has measured staff performance outcomes in terms of ability and motivation post training,[15] and has looked towards the long-term objective of creating a sustainable impact on a community by fostering a knowledgeable service delivery network with the capacity to respond appropriately to the needs of people with dementing illnesses and their families.[16]

Although we cannot currently provide conclusive research findings, our preliminary questionnaire,[10] along with general observations of units that have received the program, reflect some of the general findings experienced by Montreal's Hôpital Notre-Dame de Lourdes.[17] These included: a decrease in fear, anxiety and guilt on the part of the caregivers; consolidation of team work (team-building); collective creativity towards problem solving; and finding adapted solutions. All of these findings would justify the development and diffusion of such a massive educational training program. The question should be: can a large geriatric long-term care facility transform itself into a *milieu-de-vie* offering quality care, adapted activity stimulation programs and an enriched psychosocial environment through staff educational training? This author believes it can.

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Recommended reading:

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Calendar of Events

Events scheduled for 2001 of interest to physicians and caregivers involved in Alzheimer's Disease care.

Date	*Event / Location*	*Contact information*
March 18-20, 2001	The Rotman Research Institute 11th Annual Annual Conference, Dementia: Biological and Clinical Advances. Toronto, ON.	Tel: 416-785-2500 ext. 2363 Fax: 416-785-4215 *conference@rotman-baycrest.on.ca* www.rotman-baycrest.on.ca/conf
March 21-24, 2001	STROKE – 5th International Stroke Meeting. Istanbul, Turkey.	—
March 26-27, 2001	14th Annual Alzheimer Symposium. Toronto, ON.	Tel: 416-516-6678 *details.judy@home.com*
April 1-5, 2001	5th International Converence: Progress in Alzheimer's and Parkinson's Diseases. Kyoto, Japan.	Tel: 81-3-3813-3111 ext. 3321 Fax: 81-3-5800-0547 *y_mizuno@med.juntendo.ac.jp* http://mc-net.jtbcom.co.jp/adpd2001
April 5-7, 2001	Annual Canadian Alzheimer Society Conference. Halifax, NS.	Tel: 1-800-616-8816 *conference@alzheimer.ca* www.alzheimer.ca
April 21-25, 2001	11th Meeting of the European Neurological Society (ENS). Paris, France.	www.ensinfo.com
May 5-10, 2001	American Psychiatric Association 154th Annual Meeting. New Orleans, USA.	Tel: 888-357-7924 Fax: 202-682-6850 www.psych.org
May 5-11, 2001	American Academy of Neurology 53rd Annual Meeting. Philadelphia, USA.	www.aan.com/about.html
June 12-16, 2001	Canadian Congress of Neurological Sciences (CCNS). Halifax, NS.	www.ccns.org
June 16-20, 2001	Canadian Congress of Neuropsychopharmacology (CCNP) Annual Congress. Banff, AB.	—

Date	*Event / Location*	*Contact information*
June 17-22, 2001	17th World Congress of Neurology (WCN). London, UK.	www.concorde-uk.com/wcn-2001/
June 28-July 1, 2001	5th International Care/Case Management Conference – Case/Care: Who Needs It? Vancouver, BC.	Tel: 415-974-9600 *info@asa.asaging.org* www.asaging.org
June 29-July 1, 2001	4th Conference of the International Association of Homes & Services for the Aging. Vancouver, BC.	*iahsa@aahsa.org* www.aahsa.com/iahsa
July 1-6, 2001	International Association of Gerontology World Congress 2001. Vancouver, BC.	Tel: 604-291-5062 Fax: 613-291-5066 *iag@sfu.ca* www.harbour.sfu.ca/iag/
July 15-18, 2001	The 10th National Alzheimer's Disease Education Conference. Chicago, Illinois.	Tel: 312-335-5790 www.alz.org
Sept. 9-14, 2001	10th IPA International Conference: Bridging the gap between brain and mind. Nice, France.	Tel: 33-4-9392-8161 *ipa2001@nice-acropolis.com*
Oct. 13-17, 2001	European College of Neuropsychopharmacology (ECNP) 14th Annual Meeting and Congress. Istanbul, Turkey.	www.ecnp.nl/
Oct. 25-27, 2001	17th Alzheimer's Disease International Conference: Partnerships in Dementia Care. Christchurch, New Zealand.	Tel: 64-3-364-2534 *alz@cont.canterbury.ac.nz* www.conference.canterbury.ac.nz/alzheimer2001
Nov. 15-19, 2001	Canadian Academy of Geriatric Psychiatry (CAGP). Montreal, QC.	www.psychiatry.ubc.ca/geriat/CAGP/cagp.htm

Depression and Dementia: What Clinicians Need to Know (Part 2)

Assessing risk for suicide in depressed elderly patients with dementia is of great importance to healthcare professionals or caregivers who regularly see patients from this population. This part of a three-part series on depression and dementia takes a look at the risk factors and danger zones for suicide in these patients, and goes on to discuss available non-pharmacologic depression therapy.

by Bernard Groulx, MD, CSPQ, FRCPC

Dr. Groulx is Associate Professor, McGill University and Chief Psychiatrist, Ste-Anne-de-Bellevue Hospital, McGill Centre for Studies in Aging, McGill University, Montreal, Quebec.

As we saw in Part 1 of this article,[1] the clinical picture of depression in the elderly, particularly when associated with dementia, is very complex and demands a rigorous evaluation.[1] In this installment, we will round off the patient evaluation with a thorough assessment of suicidal risks, and explore the various non-pharmacologic treatment options.

Suicide

Older adults, whether patients themselves or caregivers of patients with dementia, are at a higher risk for suicide than are people in other age groups. With very few exceptions, suicide rates in countries throughout the world rise during the course of life to peak in old age for both men and women (Figure 1). As a rule, older adults do not convey the message that there are desperate as easily as the younger population, and are very serious in their attempts at suicide. The ratio between attempts and completed suicide is 4:1 in older adults as opposed to 20:1 in the general population and 200:1 in young women.[2]

In this light, it becomes even more important for family physician to assess for risk of suicide with suspected or confirmed depression. This screening can be achieved through direct questioning about feelings of hopelessness or about thoughts of dying or suicide.[3] There are 10 well-recognized risk factors in suicide that form an easy-to-remember acronym: SAD PERSONS (Table 1).

Risk Factors in Suicide

Sex. The suicidal risk is higher in men than in women. As a rule, there are three to four times the number of suicides in men than there are in women.

Age. As mentioned above, the risk for suicide augments with age. In women, the rate reaches its peak at the age of 75 years and over

(30 suicides per 100,000 women). In men, the rate peaks in this same age group (75 suicides per 100,000 men). The World Health Organization (WHO) found that, in 98% of the countries of the world, the highest rates of suicide, in men and women, are in those 75 years of age and older.[4] For the past 10 to 15 years in North America, 25% of all suicides were committed by people aged 65 years and over.

Depression. The presence of clinical depression or major affective disorder plays a major role in the risk for suicide. For a list of symptoms of depression, refer to Part 1 of this article[1] for the useful acronym, SIG E CAPS.

Previous attempt. As a rule, and if all ages are examined together, there is about 10 times the number of suicidal attempts than suicides. However, as a particular sub-group, those that have made a previous suicidal attempt (even if this attempt occurred many years ago) are 10 times more likely to die as a result of suicide than is the population in general.

Ethanol. Alcohol seems to play a role in the majority of suicidal attempts. It can be used as an auto-medication in an attempt to counteract psychic distress, and always leads to a lowering of judgement. Chronic alcoholism or, worse, a recent return of alcoholic problems, is very serious and family physicians should never hesitate to assess this situation with their elderly patients. It is likely that a chronically alcoholic elderly male patient who says he is suicidal represents a clinical situation of the utmost urgency.

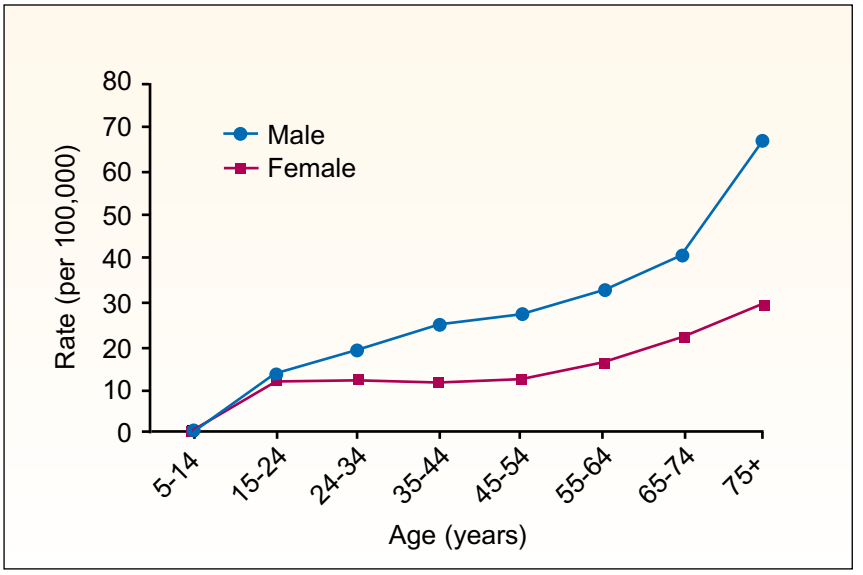

Figure 1. Suicide rates worldwide in 1995 by gender and age – WHO.

Rational losses and loss of rationality. An individual's losses can include, among others, the death of a friend or a family member, a feeling of loss of usefulness, loss of vigor and loss of self-esteem. These all are important factors. Loss of rationality refers here to the deficiencies in judgement that will appear in early dementia, particularly affecting the frontal lobes (often the case in Alzheimer's disease).

Social deprivation, solitude. An absence of familial support or community ties play a role in elevating risk for suicide. Living alone, and solitude in general, become risk factors.

Organized plan. A very precise and organized plan of suicide should send important signals to family physicians and other health-care professionals.

No spouse. Although it is mentioned above that solitude is, by itself, a risk factor, the specific absence of a spouse or a loved one is also an important, separate risk factor. It is important to remember that the absence of a spouse can be the cause or consequence of depression.

Sickness. The co-existence of physical illnesses, particularly chronic medical illnesses and, even more important, medical illnesses associated with pain, are of the upmost importance in establishing risk for suicide.

Danger Zones

In addition to the risk factors outlined above, there are several well recognized "danger zones" associated with suicide. These can be understood as follows:

The "three month" law. There is a clear danger of recurrence three months after a first suicidal attempt. Psychological factors may be at at work here. In the few weeks following a suicidal attempt, the mobilization of physicians, care providers, friends and family members is usually quite impressive to the patient. After a while, this activity and interest often "cools down," leading to a return of feelings of solitude and despair.

The "one month" rule. This is an *absolute* rule that must never be forgotten by any

Table 1
Risk Factors for Suicide: SAD PERSONS acronym

- **S**ex
- **A**ge
- **D**epression
- **P**revious attempt
- **E**thanol
- **R**ational losses and losses of rationality
- **S**ocial deprivation and solitude
- **O**rganized plan
- **N**o spouse
- **S**ickness

professional caregiver. In the case of a suicide of an elderly patient with or without dementia, the risk for suicide is immense in the few following weeks in *everyone* who has been in contact with the patient in question. When someone has emotional, professional, sympathetic or empathetic ties with someone who has committed suicide, pessimistic reflections (*e.g.,* on the meaning of life) can be provoked. Anyone who is somewhat fragile at that time (for whatever reason) is seriously at risk for suicide. This includes all other patients of the unit if the patient was in a hospital or a nursing home, as well as family members, friends and all the clinical caregivers.

The anniversaries law. Wedding anniversaries, birthdays or death anniversaries of a loved one, as well as special holidays like Christmas, have a great psychodynamic importance in suicide risk.

The post-surgery law. Within the elderly population, the risk for suicide increases following a surgical intervention (even relatively small surgical interventions) and clinical situations (*e.g.,* infections) that take a long time to heal.

Treatment

It is important to keep in mind the treatment goals for depression in any elderly patient.[5] These include eliminating or decreasing depressive symptoms, reducing the riks of a relapse or the eventual recurrence of a depressive episode, and increasing the quality of life for the patient. It should not be forgotten that, in elderly patients, the proper management of depression also improves general medical health status.

Non-pharmacologic Therapy

Families of patients with dementia carry a heavy burden, and fragile relatives may develop psychiatric disorders, such as depression. The benefits of reassurance, information, support and, at times, psychotherapy are obvious for family members. Furthermore, these frequently result in delayed institutionalization of the patient.

Patients with depressed symptoms early in their dementia may respond, depending on their capacity for insight and the nature of their problems, to psychotherapeutic techniques such as counselling, insight-oriented psychotherapy, life review and reminiscence therapy. These are interpersonal approaches, practiced in individual, group or family settings, that help to clarify issues, relieve social isolation and address grief reaction. Cognitive therapy that helps revise maladaptive thinking, perceptions, attitudes and beliefs also can be very useful.[6]

Symptoms of depression that occur later in dementia are more likely to respond to reality orientation techniques in an individual or small group setting. Behavioral therapy will help modify problematic behaviors by manipulating the environment. Other approaches, including relaxation techniques, music and art therapies, and even aromatherapy, can be useful.

Physicians should encourage their patients suffering from dementia, and elderly caregivers, to participate in activities offered by local senior centers or volunteer groups. Participation in daily living activities, such as shopping, social activities and entertainment, also should be encouraged. Of course, and as usual, the local Alzheimer Society remains an exceptional source of support.

In the third and final installment of this article in the next issue of *The Canadian Alzheimer Disease Review*, we will take a detailed look at the different pharmacologic treatment options for depression in this patient population.

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People with Alzheimer Disease and Related Dementias Speak Out

"I want to do as much as I can before this thing cuts me off."

"This thing" is vascular dementia. Cynthia Williams wants you to know what it's like to live with dementia.

"I want people to know how humiliating it is to be treated like someone who has something so terribly wrong with them that others don't want to be around them," Williams said. "And those who are around, talk about them, over them, around them, and treat them as though they are not intelligent any more, as though they are just fools."

It is estimated that 110,000 Canadians will develop Alzheimer Disease (AD) or a related dementia this year—approximately 70,000 women and 40,000 men.[1] This would bring the total number of Canadians with dementia in 2001 to 364,000. Over 60% of all dementia cases are AD.

Greater awareness of symptoms and diagnostic improvements are resulting in people being diagnosed at earlier stages of the disease. Some also are being diagnosed at earlier ages, as young as in their 40s, 50s and early 60s. People are discovering they have a degenerative brain disorder at a stage in their lives when they are still physically active and mentally capable of talking about how the disease affects them and how they cope.

Many of those newly diagnosed also are hungry for information and support. They are calling their local Alzheimer Societies, saying "I have Alzheimer Disease. What can you do for me?" or "I need to talk to other people who have this disease."

It is a stunning turn of events for the Alzheimer Society, which was founded, over 20 years ago, by family members seeking information, help and support to care for loved ones who often were no longer able to speak for themselves.

"People are getting diagnosed earlier," said Wendy Schettler, program director at the Alzheimer Society of Manitoba, "and they are taking responsibility for some of the things they need to do to educate themselves and plan for the future."

When the 58-year-old Williams, of Surrey, British Columbia discovered she had vascular dementia, she realized she would have to take early retirement.

"Losing my job as a nurse is one of the hardest things I've had to accept," Williams said. "It's difficult not being able to be with people watching their kids get better, be with families watching their loved ones pass on, be there and feel needed."

To help fill that void, Williams speaks out at workshops and makes presentations to Alzheimer caregivers, health professionals and anyone who cares enough to listen.

Dale Griffith, 64, of Victoria Beach, Manitoba, also has gone public, telling care workers in long-term-care facilities "what AD is like from the other side." Recalling an incident when she got lost on her way home from playing bingo, Griffith admitted that "sometimes it's

scary to be unsure but I can still ask for directions and get to where I'm going."

To help cope with their disease, Griffith and Williams have joined early-stage Alzheimer support groups run by their local Alzheimer Societies. These groups provide a safe environment where people with AD and related dementias can talk about their feelings, how the disease affects them and their families, and how they cope.

Early-stage support groups provide a much-needed resource that Griffith enthusiastically supports. "I've made good friends," she said. "It has helped me to accept the facts and face the disease, so that I am not afraid."

Williams also has found the group to be instructive. "Before I went to the early-stage group," she said, "I was against everybody who told me I was forgetting. I was upset because I couldn't understand what was happening to me. I couldn't get enough literature on it. What the doctors told me didn't provide enough depth. It didn't tell me what would happen; what I would be like; what to expect. The Alzheimer Society did that. They have been a godsend. Without the early-stage support group, I would be lost still."

The Alzheimer Society currently offers early-stage Alzheimer support groups in most major communities across Canada.

To supplement AD diagnoses, the Society has published two brochures describing the kinds of changes to expect and strategies for managing these changes. The brochures, entitled "First steps: for those recently diagnosed with Alzheimer Disease" and "First steps: for families of those recently diagnosed with Alzheimer Disease," are available from local Alzheimer Societies across Canada and are posted on the Web site at *www.alzheimer.ca*.

As well, the Society has created a special section on its Web site for people with AD and related dementias. This section contains an innovative resource written by early-stage support group members from British Columbia.

Alzheimer Society executive director Steve Rudin said the creation of these resources has been spurred by earlier diagnoses, and by the fact that people in the early stages of the disease are giving voice to their needs and their experiences.

"We're seeing more people with AD who are still active, physically healthy, some with young families," Rudin said. "More money is needed to create resources and programs that are appropriate for people in the early stages."

An estimated $5.5 billion a year is currently spent on people with AD and related dementias in Canada.[2]

The Alzheimer Society is a leading funder of AD research in Canada. Rudin also calls for an expansion of research funding to accelerate the search for a cause and cure.

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For more information on AD and related dementias, Alzheimer Society programs and services, and how you can help, contact your local Alzheimer Society, visit the Society's Web site at* www. alzheimer.ca, *or call 1-800-616-8816.