THE Male patient who was 75 years old , married and high school graduate , reffered to the family medicine clinic with symptoms of delusions , aggression and insomnia.

Symptoms started 4-5 years ago . his premorbid personality was extrovert, pleasant, hard-working and social but became introvert and withdrew himself from others.

His speech gradually decreased.he was not working for 14 years.

He goes out and walk for hours and return back without getting lost.he was not interested in his house anymore(for example ,he did not care about the absence of electricity at home due to unpaid bills.)although he was in a bad economic status he used to say he was a very rich man.he said he was the bodyguard of some important people.he had paranoid persecutive ideas about people coming to his house.he sometimes walked by crossing his feet. He had abnormal behaviors such as frequent finger counting , counting his steps and not stepping on the fissures of pavements . he interpreted about women whom he does not know that they were dishonest . he used to be a clean and tidy man before the disease but started to soil and wet his clothes and bed in recent months.he did not change her clothes unless his wife gave him clean clothes.his appetite was enormously increased.he especially preferred fatty and sweet foods.

He was no history of head trauma,alchohol or substance abuse,exposure to toxins orany psychiatric or medical disease.

- Family history

A similar clinical condition is described in his two uncles with onset in sixth decades : both of them died.

In his mental status examination : he was alert ,fully - oriented and cooperated.

Speech pace and quantity was decreased.

His spontaneous attention was impaired . his affect was blunt . his memory , including instant memory and other cognitive functions were normal . his association were slow and thought content was poor . there were compulsive and stereotypical behaviors . he had no insight of his condition . reading was slow with significant mistakes.

No pathological finding was observed in his physical and neurological examination . there was no agnosia or acalculia.mini mental examination score was 25/30 in neuropsychological examination.

Laboratory test

Thyroid function test, vitamin b12 , and folic acid levels , routine biochemical and hematological tests , urinalysis , chest x-ray and ECG were within normal limits . Hepatitis markers(HBS AG and anti-HCV negative, ANTI-HBS positive),ANTI-HIV negative . routine EEG was normal . In computed tomography(CT)scan , there was significant atrophy in right frontotemporal areas and a lacunar infarct in right temporal region.in MRI there was asymmetric atrophy in dorsolateral and orbitofrontal areas predominantly in right hemisphere.

No atrophy was found in ventromedial area.in tc-99 HMPAO SPECT, asymmetric hypoperfusion was detected in a wide area containing right frontal and parietal lobes.in apolipoprotein E(APOE)(E2,E3,E4)MUTATION TEST , normal allele E3/E3 was detected.

During his presence in clinic , patient continued finger counting movements , sometimes cried without a cause and murmured.He preferred to be alone in the clinic , his communication with other patients was limited and his behaviores were slow.

Quetiapine was started to the patient to control behavioral symptoms and dose was gradually increased to 200 mg/day.

By this treatment his self-care and communication with others partially increased and cried less . however , after his discharge and during follow-up his streotypical and compulsive behaviors such as murmuring , counting steps and finger counting were counting.

Problem list:

delusions , aggression and insomnia.- introvert and withdrew himself from others

Speech-abnormal behavior -

Management of the patient with dementia

استاد راهنما:

آقای دکتر شفیعی – متخصص نورولوژی – عضو هییت علمی

ارایه دهنده:

دکتر اسمی

دستیار پزشکی خانواده

INTRODUCTION

-the mainstay of treatment is symptomatic management

-behavioral disturbances, environmental manipulations to support function

SPECIALTY-CARE REFERRAL

-comfort and knowledge base of the primary care provider

-diagnosis of the type of dementia

MEDICAL THERAPY

Disease-specific treatments:

-Neuropsychiatric symptoms

-Vascular risk factor control

-Avoiding adverse drug effects(Polypharmacy, Drugs that can exacerbate impairment,

NONPHARMACOLOGIC THERAPY AND SUPPORTIVE CARE

-Nutrition

-Rehabilitation

-Exercise programs

-Occupational therapy

-Alcohol use

CAPACITY

-Decision-making capacity

-Financial capacity(ability to independently manage)

Advance care planning

-Start early

-Talk about what is to come

- referral for a palliative care consult

SUPPORT FOR CAREGIVERS

-suffer significant stress

-get help in sharing

-Driving

-Driving risks in patients with dementia

-Predictors of unsafe driving(Mini-Mental State Examination (MMSE) score of 24 or less)

-Recommendations for patients, families, and caregivers(CDR = 2 are at high risk factor)

Falls

-major safety problem

-The MMSE((score 18 to 23)

-possibility of a myelopathy

-Behavioral disturbances(elusions, hallucinations, depression,agitation, aggression, and sleep disturbance)

Wandering and becoming lost

-Distractibility and restlessness

-Memory loss and spatial impairment

-The risk may be higher for demented men than for women.

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Home safety

-Cooking(Distractibility, forgetfulness, or difficulty following directions)

-Living alone

- self-neglect, disorientation, and poor judgment

-Presence of cerebrovascular disease

-Presence of chronic obstructive pulmonary disease

-Poorer performance on the MMSE

END-OF-LIFE ISSUES

LIFE EXPECTANCY

-Dementia shortens life expectancy(hospital admission for

bacterial pneumonia, congestive heart failure, dehydration, duodenal ulcer, and urinary tract infections)

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SUMMARY AND RECOMMENDATIONS

-Specialty referral-(type of dementia)

-Medical care

-Behavioral disturbances

-Decision-making capacity

-Driving

-Wandering

-Falls

-Caregiver support

-End-of-life issues

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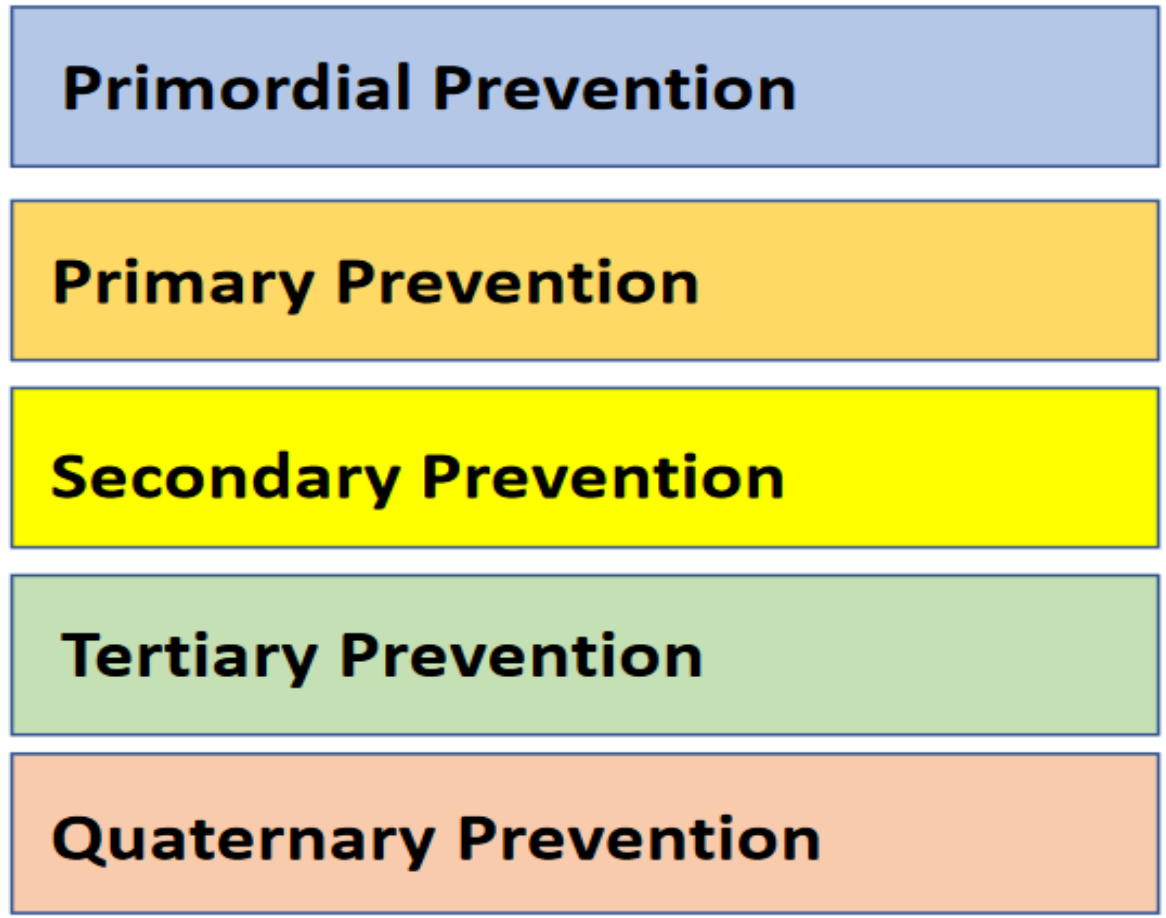
Clinical dementia rating (CDR): 0, 0.5, 1, 2, 3

Impairment	None (0)	Questionable (0.5)	Mild (1)	Moderate (2)	Severe (3)
Memory	No memory loss or slight inconstant forgetfulness	Consistent slight forgetfulness; partial recollection of events	Moderate memory loss; more marked for recent events; defect interferes with everyday activities	Severe memory loss; only highly learned material retained; new material rapidly lost	Severe memory loss; only fragments remain
Orientation	Fully oriented	Fully oriented or slight difficulty with time relationships	Moderate difficulty with time relationships; oriented for place at examination; may have geographic disorientation elsewhere	Severe difficulty with time relationships; usually disoriented in time, often to place	Oriented to person only
Judgment and problem	Solves everyday problems and handles business and financial affairs well; judgment good in relation to	Slight impairment to solving problems, similarities, differences	Moderate difficulty in handling problems, similarities, differences; social judgment usually maintained	Severely impaired in handling problems, similarities, differences; social judgment usually impaired	Unable to make judgments or solve problems
Community affairs	Independent function at usual level in job, shopping, volunteer and social groups	Slight impairment in these activities	Unable to function independently at these activities though may still be engaged in some; appears normal to casual inspection	No pretense of independent function outside of home; appears well enough to be taken to functions outside of family home	No pretense of independent function outside of home; appears too ill to be taken to functions outside a family home
Home and hobbies	Life at home, hobbies, intellectual interests well maintained	Life at home, hobbies, intellectual interests slightly impaired	Mild but definite impairment of function at home; more difficult chores abandoned; more complicated hobbies and interests abandoned	Only simple chores preserved; very restricted interests, poorly maintained	No significant function in home
Personal care	Fully capable of self care	Fully capable of self care	Needs prompting	Requires assistance in dressing, hygiene, keeping of personal effects	Requires much help with personal care; frequent incontinence

Anticholinergic activity of medications

Class	Drugs	Relative anticholinergic potency
Antihistamines	H_1 receptor antagonists, first-generation: brompheniramine, carbinoxamine, chlorpheniramine, clemastine, cyproheptadine, dimenhydrinate, diphenhydramine, doxepin, doxylamine, hydroxyzine, meclizine, triprolidine, others	High
	H_1 receptor antagonists, second-generation: fexofenadine, cetirizine*, loratadine, desloratadine, levocetirizine, others	Low
Antiparkinson	Benztropine, trihexyphenidyl	High
	Amantadine, bromocriptine, entacapone	Low
Analgesic	Opioids: codeine, hydrocodone, fentanyl, meperidine, methadone, morphine, oxycodone, tramadol, others	Low
Antimuscarinic, overactive bladder	Darifenacin, fesoterodine, flavoxate, oxybutynin, solifenacin, tolterodine, trospium	High
Antimuscarinic, spasmolytic	Atropine, belladonna-containing medications, clidinium-	High
	hyoscyamine, glycopyrrolate, homatropine, methscopolamine, propantheline, scopolamine (hyoscine)	
Antimuscarinic, inhaled bronchodilator	Ipratropium, tiotropium	High (local effect)
Antimuscarinic, ophthalmic drops (mydriatic/cycloplegic)	Atropine, cyclopentolate, homatropine, scopolamine	High (local effect)
Cardiovascular	Disopyramide	Low
Gastrointestinal	Antiemetics (eg, hydroxyzine, meclizine, promethazine, scopolamine); also refer to first-generation antihistamines above	High
	Domperidone, loperamide, prochlorperazine	Low
	H_2 receptor antagonists (cimetidine, famotidine¶)	Low
Muscle relaxant	Orphenadrine, tizanidine	High
	Cyclobenzaprine*, baclofen, methocarbamol	Low
Psychotropic	Antipsychotics, first-generation: chlorpromazine, fluphenazine, loxapine, methotrimeprazine (levomepromazine), thioridazine, trifluoperazine	High
	Antipsychotics, first-generation: haloperidol, perphenazine*, others	Low
	Antipsychotics, second-generation: clozapine	High
	Antipsychotics, second-generation: olanzapine* quetiapine*	Low


Primordial Prevention
Primary Prevention
Secondary Prevention
Tertiary Prevention
Quaternary Prevention

Primordial Prevention

- ۱- اقدام در خصوص ترویج سبک زندگی سالم
- ۲- آموزش در خصوص تشکیل پرونده الکترونیک سلامت جهت تمامی آحاد جمعیت کشور و ارزش و اهمیت انجام مراقبتهای لازم در هر گروه سنی
- ۳- آموزش های لازم در سطح ملی برای آشنایی با علایم بیماری ریسک فاکتورها
- ۴-برگزاری جلسه با مسولان ذی ربط جهت تامین شرایط برگزاری ورزش های همگانی جهت بالا بردن امید به زندگی در جامعه
- ۵-آموزش در زمینه ترویج تغذیه سالم در بین اقشار جامعه خصوصا" سالمندان

Primary prevention

- 1.انجام مراقبتهای بهداشتی اولیه برای کلیه سطوح جامعه علی الخصوص سالمندان
- 2.انجام به موقع غربالگریها در موعد مقرر در مراکز جامع سلامت و مراکز درمانی
- 3.توصیه های تغذیه ای به آحاد جامعه در خصوص کم کردن مصرف نمک و چربیها و قند جهت جلوگیری از ابتلا به فشار خون و بیماریهای قلبی عروقی و دیابت
- .4

Secondary prevention

1. شروع زود هنگام مراقبتهای بهداشتی و درمانی در افراد مشکوک به فشار خون و بیماریهای قلبی و دیابت
2. شروع زودهنگام اقدامات درمانی جهت جلوگیری از عوارض بیماریهای ذکر شده در آینده
3. شروع زود هنگام غربالگریهای مربوطه در مراکز جامع سلامت و پیگیری درمان بیماران
4. شروع زود هنگام مشاوره های روانشناسی با سالمندان پر خطر

Tertiary prevention

1. اقدامات لازم جهت مدیریت درمان بیماران مبتلا به دمانس
2. توصیه به جلوگیری از رانندگی بیماران
3. نوشتن مشخصات بیماران در یک دستبند و اتصال دایم آن به بیمار جهت جلوگیری مفقود شدن بیمار
4. کمک گرفتن از تجهیزات دارای فن آوری جی پی اس جهت رد یابی بیمار
5. تغییر چیدمان وسایل منزل جهت جلوگیری از سقوط بیمار
6. کمک گرفتن از کارشناس تغذیه جهت جلوگیری از سوء تغذیه بیمار
7. مانیتورینگ و فالو آپ به موقع بیماران
8. گرفتن وکیل جهت مدیریت مالی بیمار

Quaternary prevention

1.جلوگیری از انجام اقدامات درمانی که تاثیری در سیر بیماری ندارد.(با توجه به اینکه تشخیص این بیماری بالینی می باشد.)

2.جلوگیری از انجام اقدامات تشخیصی تهاجمی و یا بستری کردن بی مورد بیمار در بخش مراقبت های ویژه بیمارستان

3.جلوگیری از تجویز داروهایی که برای سلامت بیمار مضر می باشد و جلوگیری از تداخلات دارویی