Care of the elderly patient(Geriatrics)

Principles of assessment of the older patient

-Hearing
-vision
-Polympharmacy
-Mobility
-Cognition

Geriatric Assessment

Key Points

- A comprehensive geriatric assessment includes a systematic approach assessing medical, functional, psychological, and social domains.
- A medication review is an essential component of a geriatric assessment.
- A multidisciplinary approach is used to identify intervention and management strategies.
- A questionnaire targeted to the geriatric assessment domains will expedite the patient visit.
- The goals of the geriatric assessment are to maintain function and preserve quality of life.

Table 4-2 Goals of Geriatric Assessment

1. Focus on preventive medicine rather than acute medicine.
2. Focus on improving or maintaining functional ability and not necessarily a "cure."
3. Provide a long-term solution for "difficult to manage" patients with multiple physicians, recurrent emergency department visits, and hospital admissions with poor follow-up.
4. Aid in the diagnosis of health-related problems.
5. Develop plans for treatment and follow-up care.
6. Establish plans for coordination of care.
7. Determine the need and site of long-term care as appropriate.
8. Determine optimal use of health care resources.
9. Prevent readmission into the hospital.

FUNCTIONAL ASSESSMENT

A primary goal of the geriatric assessment is to identify interventions to help patients maintain function and stay at home in independent living situations. The functional assessment focuses on activities of daily living (ADLs) and risk screening for falls. The basic ADLs include eating, dressing, bathing, transferring, and toileting. The instrumental ADLs (IADLs) consist of shopping, managing money, driving, using the telephone, housekeeping, laundry, meal preparation, and managing medications (Katz, 1983). Home health and social services referral should be considered for patients who have difficulty with the ADLs. A simple method of screening patients for gait and mobility problems

PSYCHOLOGICAL ASSESSMENT

The psychological assessment screens for cognitive impairment and depression, two conditions that significantly impact both the patient and the family. The most studied test to screen for cognition is the Mini-Mental State Examination, which is best for identifying patients with moderate or severe dementia. Depression can be readily screened with shorter versions of the original 30-item Yesavage Geriatric Depression Scale (GDS) (Yesavage et al., 1983). The five-item version of the GDS asks the following:

1. Are you basically satisfied with your life?
2. Do you often feel bored?
3. Do you often feel helpless?
4. Do you prefer to stay home rather than going out and doing new things?
5. Do you feel pretty worthless the way you are now?

A score of greater than two positive answers is positive (97% sensitivity, 85% specificity) (Rinalde et al., 2003).

Falls

Key Points

- Falls result in significant morbidity, mortality, and functional decline.
- Patients should be asked about their history of falls and balance issues.
- Medication review is a key component of falls assessment.
- Multifactorial interventions can reduce the rate of falls.
- Exercise programs that focus on strength and balance training are most effective in preventing falls.

RISK FACTORS

The multiple risk factors for falling can be categorized as intrinsic or extrinsic. Intrinsic risk factors include age-related physiologic changes and diseases that affect the risk of falling (Table 4-3). Extrinsic risk factors include medications and environmental obstacles. The risk of falling increases significantly in people with multiple risk factors. A prospective study found that 19% of older patients with one risk factor have a fall in a given year compared with 60% of older patients with three risk factors (Tinetti et al., 1988).

Taking four or more prescription drugs is itself a risk factor for falling. Also, several medication classes have a higher potential to cause falls, including tricyclic antidepressants, neuroleptic agents, serotonin reuptake inhibitors, benzodiazepines, and class 1A antiarrhythmic medications. Narcotic analgesics, antihistamines, and anticonvulsants are also associated with increased risk for falls (Ensrud et al., 2002; Rubenstein and Josephson, 2002).

Physical restraints have been used in an attempt to reduce falling. Although the focus here is on community-dwelling elderly persons, it is worth noting that use of physical restraints in nursing home and hospital settings does not reduce the risk of falling and is instead associated with an increased risk of injury (Neufeld et al., 1999). Since the 1980s, the use of physical restraints has been appropriately and dramatically reduced.

Table 4-3 Intrinsic Risk Factors for Falls

Age-related changes in vision, hearing, or proprioception
Decreased blood pressure response to postural changes
Delayed compensatory muscle response to postural changes
Age older than 80 years
Cognitive impairment
Depression
Functional impairment
History of falls
Visual impairment
Gait or balance impairment
Use of assistive device
Arthritis
Leg weakness

Table 4-4 Initial Evaluation of Falls

History	Circumstances of fall Presence of risk factors Medical conditions Medication review Functional abilities
Physical examination	Postural blood pressure CV examination focusing on rhythm and murmurs Visual acuity Neurological examination: strength, proprioception, cognition Musculoskeletal examination: ROM, joint abnormalities Gait and balance assessment
Diagnostic studies	None required routinely

SCREENING

At present, no one screening test can be recommended to identify potential fallers (Gates et al., 2008). The two best predictors of falls are a history of falls and a reported abnormality in gait or balance (Ganz et al., 2007). "Have you had any falls in the past year?" is a simple screening question that can be answered by the patient or caregiver in a previsit

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CV, Cardiovascular; *ROM*, range of motion.

Elder Abuse

Key Points

- Elder abuse is underreported.
- Direct questioning for elder abuse is recommended.
- Physicians should recognize the physical and behavioral signs of abuse.
- A positive screening result for elder abuse should be followed by a safety assessment.
- Physician reporting requirements regarding elder abuse vary by state.

Table 4-5 National Center on Elder Abuse Definitions

Physical abuse	Inflicting or threatening to inflict physical pain or injury on a vulnerable elder or depriving him or her of a basic need
Emotional abuse	Inflicting mental pain, anguish, or distress on an elder person through verbal or nonverbal acts
Sexual abuse	Nonconsensual sexual contact of any kind
Exploitation	Illegal taking, misuse, or concealment of funds, property, or assets of a vulnerable elder
Neglect	Refusal or failure by those responsible to provide food, shelter, health care, or protection for a vulnerable elder
Abandonment	Desertion of a vulnerable elder by anyone who has assumed the responsibility for care or custody of that person
Self-neglect	Characterized as the behavior of an elderly person that threatens his or her own health or safety

Table 4-7 Physical Signs of Elder Abuse

General	Weight loss, dehydration, and poor hygiene
HEENT	Traumatic alopecia; poor oral hygiene; absent hearing aids, dentures, or eyeglasses; subconjunctival or vitreous hemorrhage
Skin	Hematomas, welts, burns, bites, bruises, pressure sores
Genitorectal	Inguinal rash, fecal impaction
Musculoskeletal	Fractures, contractures

HEENT, Head, ears, eyes, nose, throat.

Table 4-12 Drugs to Avoid or Limit in the General Elderly Population

Pharmacologic Agents	Comments
Drug Classes to Avoid	
Antihistamines	Nonsedating antihistamines (e.g., fexofenadine, loratadine) are considered safer
Antispasmodics	May result in anticholinergic side effects, sedation, and generalized weakness
Barbiturates	Highly addictive with many side effects; numerous other agents for sedation are preferred
GI antispasmodic drugs (e.g., dicyclomine, hyoscyamine)	Highly anticholinergic
Long-acting benzodiazepines (e.g., chlordiazepoxide, diazepam)	Short- or medium-acting agents are preferred; start with smaller doses
Muscle relaxants	May result in anticholinergic side effects, sedation, and generalized weakness
Specific Drugs to Avoid	
Amitriptyline	Highly anticholinergic; use newer antidepressants or less anticholinergic tricyclics
Chlorpropamide	Long half-life leads to increased risk of hypoglycemia; newer insulin secretagogues are preferred
Dipyridamole	May cause dizziness and hypotension
Disopyramide	Anticholinergic and negative inotropic properties
Doxepin	Highly anticholinergic; use newer antidepressants or less anticholinergic tricyclics
Indomethacin	Compared with other NSAIDs, risk of CNS, GI, and renal side effects is greater
Meperidine	Active metabolite normeperidine may accumulate and cause CNS stimulation and seizures
Meprobamate	Highly addictive; may worsen depression; other anxiolytics preferred
Methyldopa	Common side effects include depression, sedation, and edema; multiple antihypertensive options are available
Pentazocine	Mixed narcotic agonist–antagonist with potent CNS effects
Phenylbutazone	May cause severe bone marrow suppression; other NSAIDs are preferred
Propoxyphene	Weak narcotic pain reliever (probably no better than acetaminophen alone) but has same side profile as other narcotics
Reserpine	CNS side effects include sedation and depression; multiple antihypertensive options are available
Ticlopidine	More toxic effects than aspirin or clopidogrel
Trimethobenzamide	May cause extrapyramidal side effects; numerous alternative antiemetics are available
Drugs to Limit	
Digoxin	Limit to <0.125 mg/day in most elderly patients
Ferrous sulfate	Limit to <325 mg/day in most elderly patients
Spironolactone	>50 mg; avoid in patients with heart failure or creatinine clearance <30 mL/min

گروه سنی سالمندان(۶۵ سال و بیشتر)

-واکسیناسیون
-غربالگریها مثل:
*پرسشنامه ی تغذیه MNAوتعیینBMI
*-پرسشنامه روان(نمره ۶ و بیشتر ،احتمال افسردگی وجود دارد و نیازمند ارجاع به پزشک میباشد.
نمره کمتر از ۶ بیانگرعدم افسردگی می باشد.)
-*غربالگریهای مربوط به خطرسنجی بیماریهای قلبی وعروقی وسکته ها(میزان خطر۱۰ساله ی سکته ی قلبی و مغزی کشنده یا غیرکشنده برای ارزیابی این مورد از دیتاهای جنس،سن،ابتلابه دیابت ،سیگار،فشارخون سیستولیک و توتال کلسترول استفاده میشود)
*تست تعادل درحرکت(بیشتر از ۱۲ثانیه طول بکشد غیرطبیعی است)
*پرسشنامه Activity Daily Living(ADL)
-مکمل های تغذیه ای مثل ویتامین Dوکلسیم و مولتی ویتامین ها
-آموزش تغذیه و فعالیت فیزیکی و ترک سیگار (۵سال بعد از ترک خطر قلبی عروقی نصف و بعداز۱۰سال خطر مشابه افراد غیرسیگاری میشود)و قلیان و همچنین آموزشهای مربوط به falling(سقوط در طی یکسال اخیر اهمیت زیادی دارد)وتغییرات اورتوستاتیک فشارخون(شامل ۳۰ ثانیه نشستن قبل از برخاستن و نوشیدن آب آشامیدنی خصوصا صبحها قبل از برخاستن ازخواب و استفاده از جوراب واریس)
-پیگیری بیماریهای مزمن و داروها

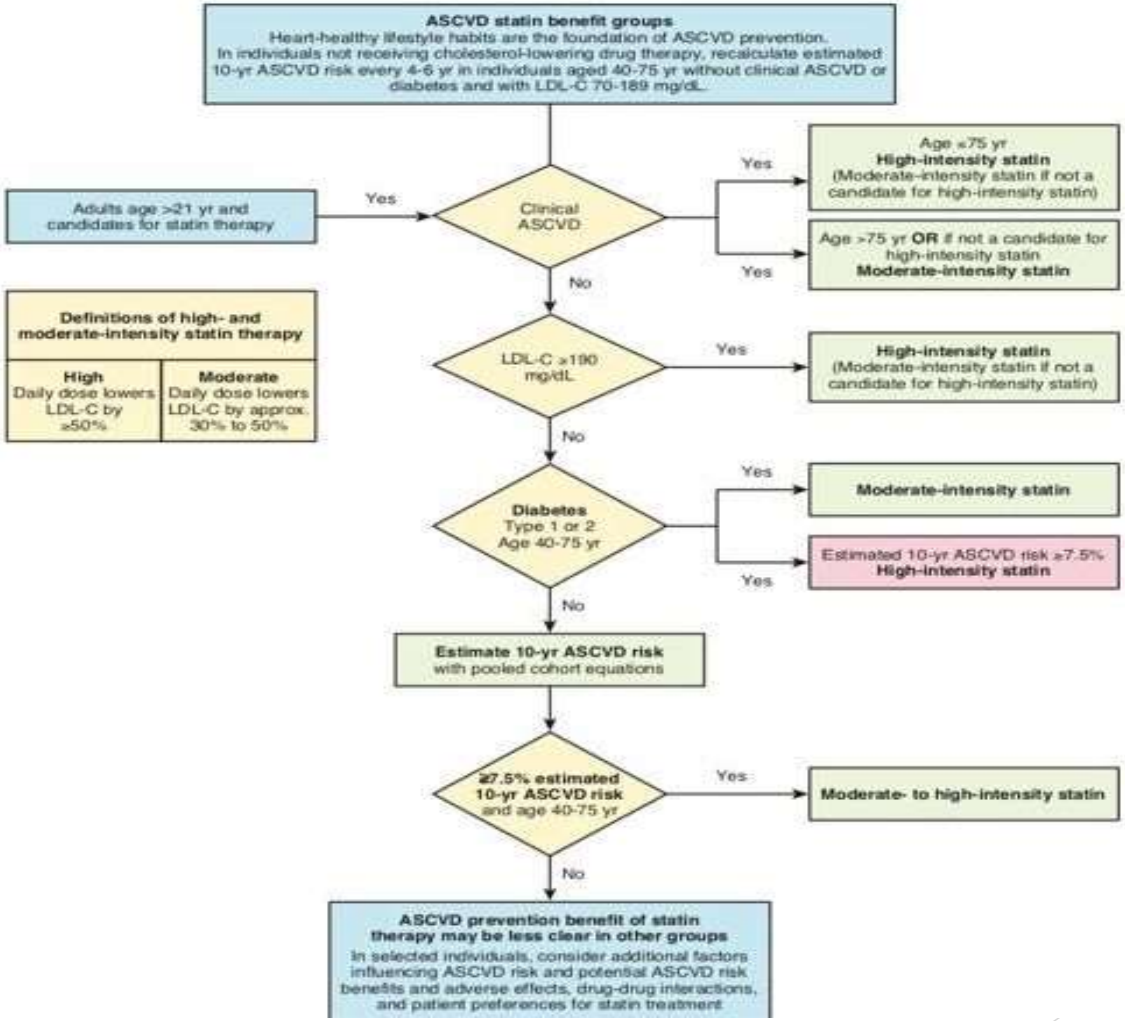
ASCVD statin benefit groups
Heart-healthy lifestyle habits are the foundation of ASCVD prevention.
In individuals not receiving cholesterol-lowering drug therapy, recalculate estimated 10-yr ASCVD risk every 4-6 yr in individuals aged 40-75 yr without clinical ASCVD or diabetes and with LDL-C 70-189 mg/dL.
Adults age >21 yr and candidates for statin therapy
Yes
Clinical ASCVD
Yes
Age ≤75 yr
High-intensity statin
(Moderate-intensity statin if not a candidate for high-intensity statin)
Yes
Age >75 yr OR if not a candidate for high-intensity statin
Moderate-intensity statin
No
Definitions of high- and moderate-intensity statin therapy
High
Daily dose lowers LDL-C by ≥50%
Moderate
Daily dose lowers LDL-C by approx. 30% to 50%
LDL-C ≥190 mg/dL
Yes
High-intensity statin
(Moderate-intensity statin if not a candidate for high-intensity statin)
No
Diabetes
Type 1 or 2
Age 40-75 yr
Yes
Moderate-intensity statin
Yes
Estimated 10-yr ASCVD risk ≥7.5%
High-intensity statin
No
Estimate 10-yr ASCVD risk
with pooled cohort equations
≥7.5% estimated 10-yr ASCVD risk
and age 40-75 yr
Yes
Moderate- to high-intensity statin
No
ASCVD prevention benefit of statin therapy may be less clear in other groups
In selected individuals, consider additional factors influencing ASCVD risk and potential ASCVD risk benefits and adverse effects, drug-drug interactions, and patient preferences for statin treatment

Table 27-2 High-, Moderate-, and Low-Intensity Statin Therapy

High-Intensity Statin Therapy	Moderate-Intensity Statin Therapy	Low-Intensity Statin Therapy
Daily dose lowers LDL-C by approximately ≥50%	Daily dose lowers LDL-C by ≈30% to <50%	Daily dose lowers LDL-C by <30%
Atorvastatin 40 mg or 80 mg Rosuvastatin 20 mg or 40 mg	Atorvastatin 10 (20) mg Rosuvastatin (5) 10 mg Simvastatin 20-40 mg† Pravastatin 40 (80) mg Lovastatin 40 mg Fluvastatin XL 80 mg Fluvastatin 40 mg BID Pitavastatin 2-4 mg	Simvastatin 10 mg Pravastatin 10-20 mg Lovastatin 20 mg Fluvastatin 20-40 mg Pitavastatin 1 mg

Table 1: AHA/ACC[a] Guideline Recommendations by Blood Pressure Category

BP[b] Category	Pressure Ranges	Recommendations
Normal BP	<120/<80 mmHg	Promote healthy lifestyle; reassess BP annually.
Elevated BP	120-129/<80 mmHg	Start with nonpharmacologic therapy, reassess BP in 3-6 months.
Stage1 Hypertension	130-139/80-89 mmHg	**ASCVD[c] or 10-year CVD[d] risk ≥10%:** Start with both nonpharmacologic and pharmacologic therapy. Reassess BP in 1 month. If at goal, reassess every 3-6 months. If not at goal, assess for adherence and consider intensification of therapy.
		No ASCVD and 10-year CVD risk <10%: Start with nonpharmacologic therapy, reassess BP in 3-6 months. If not at goal, consider initiation of pharmacologic therapy.
Stage 2 Hypertension	≥140/≥90 mmHg	Start with both nonpharmacologic and pharmacologic therapy. Reassess BP in 1 month. If at goal, reassess every 3-6 months. If not at goal, assess for adherence and consider intensification of therapy.

a: AHA/ACC, American Heart Association, American College of Cardiology.
b: BP, blood pressure.
c: ASCVD, atherosclerotic cardiovascular disease.
d: CVD, cardiovascular disease

While the authors acknowledge that this new recommendation is based upon observational


Thank you